STIC Search Report
Biotech-Chem Library

STIC Database Tracking Number: 99691

TO: Molly Ceperley
Location: CM1/8D15/7E12
Art Unit: 1641
Monday, July 28, 2003
Case Serial Number: 09/889795

From: Paul Schulwitz
Location: Biotech-Chem Library
CM1-6B06
Phone: 305-1954

paul.schulwitz@uspto.gov

Search Notes

Examiner Ceperley,

See attached results.

If you have any questions about this search feel free to contact me at any time.

Thank you for using STIC search services!

Paul Schulwitz
Technical Information Specialist
STIC Biotech/Chem Library
(703)305-1954

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=> d que
L1             1 SEA FILE=REGISTRY ABB=ON  PLU=ON  N-HYDROXYSUCCINIMIDE/CN
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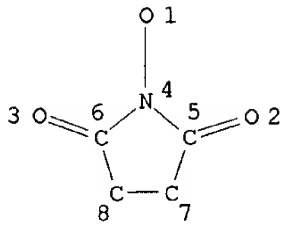

Considered
07/29/03
MEC

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DEFAULT ECLEVEL IS LIMITED

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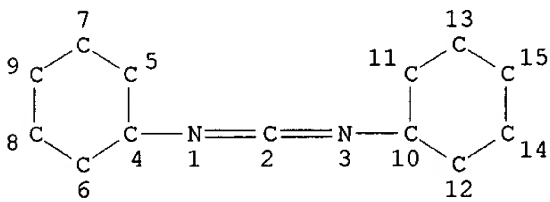

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DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

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RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  15

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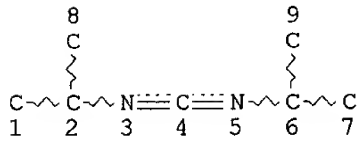

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NUMBER OF NODES IS 9

STEREO ATTRIBUTES: NONE
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L21 21 SEA FILE=HCAPLUS ABB=ON PLU=ON L20 AND (REHYDR? OR HYDRAT? OR DRY? OR DRIED OR FREEZEDR? OR SEQUESTER?)

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L21 ANSWER 1 OF 21 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:307516 HCAPLUS
DOCUMENT NUMBER: 138:332204
TITLE: Preparation and use of a quantitative immunoassay for the determination of progesterone levels in a blood sample
INVENTOR(S): Das, Chandana
PATENT ASSIGNEE(S): The Director All India Institute of Medical Sciences, India
SOURCE: Indian, 18 pp.
CODEN: INXXAP
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

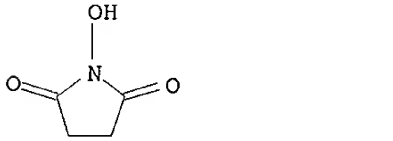
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
IN 176675	A	19960824	IN 1991-DE257	19910327

PRIORITY APPLN. INFO.: IN 1991-DE257 19910327

AB This invention relates to a process for the prepn. of a device for detg. the quant. level of progesterone contained in a blood sample comprising washing a polypropylene test tube with distd. water. Said test tube is **dried** at room temp. Applying a coating of a progesterone antibody having sensitivity of 2 to 5 pg/mL obtained from a rabbit injected with progesterone combined with bovine serum albumin on the inner surface of said test tube. And adding progesterone penicillinase conjugate to the blood sample to be tested.

IC ICM G01N033-53

CC 2-1 (Mammalian Hormones)
Section cross-reference(s): 32
IT 123-91-1, Dioxane, reactions **1892-57-5 6066-82-6,**
N-Hydroxysuccinimide 50909-89-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of progesterone penicillinase conjugate to use in a quant.
progesterone immunoassay of a blood sample)
IT **1892-57-5 6066-82-6,** N-Hydroxysuccinimide
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of progesterone penicillinase conjugate to use in a quant.
progesterone immunoassay of a blood sample)
RN 1892-57-5 HCAPLUS
CN 1,3-Propanediamine, N'-(ethylcarbonimidoyl)-N,N-dimethyl- (9CI) (CA INDEX NAME)



RN 6066-82-6 HCAPLUS
CN 2,5-Pyrrolidinedione, 1-hydroxy- (9CI) (CA INDEX NAME)

L21 ANSWER 2 OF 21 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2003:76731 HCAPLUS
DOCUMENT NUMBER: 138:133508
TITLE: Method for chemical functionalization of solid supports and use in immobilization of biomolecules
INVENTOR(S): Dugas, Vincent; Chevalier, Yves; Souteyrand, Eliane
PATENT ASSIGNEE(S): Centre National De La Recherche Scientifique, Fr.; Ecole Centrale De Lyon
SOURCE: PCT Int. Appl., 32 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003008360	A1	20030130	WO 2002-FR2364	20020705

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,

CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

FR 2826957 A1 20030110 FR 2001-9082 20010709

PRIORITY APPLN. INFO.: FR 2001-9082 A 20010709

AB The solid supports are selected from glass, plastics, metal oxides, silica, semiconductor materials and are functionalized by silylation or hydrosilylation with substituted alkyl(alkylamino)silanes contg. protected carboxyl groups at the ends of C2-18 linear or branched hydrocarbon chains. Biomols. can be attached via thermal deprotection of the carboxyl groups (esters) followed by reaction with amine or hydroxyl-functionalized nucleic acids, polypeptides, lipids, carbohydrates, hormones, etc. Glass slides were immersed in H2SO4/H2O2 cleaning soln. at 80.degree. for 1 h, rinsed with ultrapure water, and **dried**; silylation of the cleaned surfaces was carried out by heating to 140.degree. under N or Ar, cooling in an ice bath, adding 150 mL pentane to cover the surface, then 300 .mu.L silane and heating to 140.degree. to evap. the pentane under inert gas flow for 12 h. The silanized plates were cleaned under ultrasound in THF bath for use in immobilization of oligonucleotides.

IC ICM C07B047-00
ICS B01J031-16; G01N033-547; G01N033-543

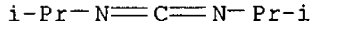
CC 9-14 (Biochemical Methods)

IT 75-77-4DP, Chlorotrimethylsilane, reaction products with carboxylamine compds., esters, biomol. derivs. **693-13-0DP**, Diisopropylcarbodiimide, reaction products with glass-anchored alkoxyaminosilane esters, biomol. derivs. **6066-82-6DP**, N-Hydroxysuccinimide, reaction products with glass-anchored alkoxyaminosilane esters, biomol. derivs.
RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(silylation and hydrosilylation of solid supports with alkylaminosilane esters and thermal deprotection of esters to immobilize biomols.)

IT **693-13-0DP**, Diisopropylcarbodiimide, reaction products with glass-anchored alkoxyaminosilane esters, biomol. derivs. **6066-82-6DP**, N-Hydroxysuccinimide, reaction products with glass-anchored alkoxyaminosilane esters, biomol. derivs.
RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(silylation and hydrosilylation of solid supports with alkylaminosilane esters and thermal deprotection of esters to immobilize biomols.)

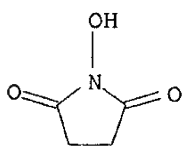
RN 693-13-0 HCAPLUS

CN 2-Propanamine, N,N'-methanetetraylbis- (9CI) (CA INDEX NAME)



RN 6066-82-6 HCAPLUS

CN 2,5-Pyrrolidinedione, 1-hydroxy- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 3 OF 21 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:825899 HCAPLUS
DOCUMENT NUMBER: 138:113964
TITLE: Preparation, characterization and application of alkanethiol self-assembled monolayers modified with tetrathiafulvalene and glucose oxidase at a gold disk electrode
AUTHOR(S): Campuzano, Susana; Galvez, Rocio; Pedrero, Maria; De Villena, F. Javier Manuel; Pingarron, Jose M.
CORPORATE SOURCE: Dpto. Quimica Analitica. Facultad de CC. Quimicas. Universidad Complutense de Madrid, Madrid, E-28040, Spain
SOURCE: Proceedings - Electrochemical Society (2001), 2001-18(Chemical and Biological Sensors and Analytical Methods II), 602-608
CODEN: PESODO; ISSN: 0161-6374
PUBLISHER: Electrochemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

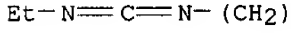
AB In this work, the results obtained with a gold disk electrode modified with alkanethiol self-assembled monolayers (SAMs), and glucose oxidase (GOD), and the redox mediator tetrathiafulvalene (TTF) immobilized atop are presented. Thus, a gold electrode modified with a mercaptopropionic acid SAM, where GOD and TTF were immobilized by crosslinking with glutaraldehyde, allowed linear calibration curves for glucose, obtained by amperometry in stirred solns. at an applied potential of +0.20 V, in the 5.0 10-6 - 1.0 10-2 mol L-1 range. A detection limit of 1.3 10-6 mol L-1, and a RSD of 5.2% (n=10), at a concn. level of 1.0 10-4 mol L-1, were found. No leaching of the enzyme and mediator is obsd. during the whole working day. The modified electrode is stable in **dry** conditions for 24 h and for at least 100 h if kept in a 4.degree.C H2PO4-/HPO42- buffer soln. (pH 7.4).

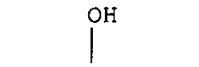
CC 72-2 (Electrochemistry)
Section cross-reference(s): 9, 60, 66

IT 111-30-8, Glutaraldehyde **1892-57-5**, 1-(3-Dimethylaminopropyl)-3-ethylcarbodiimide **82436-78-0**, N-Hydroxysulfosuccinimide
RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PROC (Process)
(use for enzyme crosslinking immobilization on gold disk electrode modified with alkanethiol self-assembled monolayers with tetrathiafulvalene and glucose oxidase)

IT **1892-57-5**, 1-(3-Dimethylaminopropyl)-3-ethylcarbodiimide **82436-78-0**, N-Hydroxysulfosuccinimide
RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PROC (Process)
(use for enzyme crosslinking immobilization on gold disk electrode modified with alkanethiol self-assembled monolayers with tetrathiafulvalene and glucose oxidase)

RN 1892-57-5 HCAPLUS
CN 1,3-Propanediamine, N'-(ethylcarbonimidoyl)-N,N-dimethyl- (9CI) (CA INDEX NAME)





RN 82436-78-0 HCAPLUS
CN 3-Pyrrolidinesulfonic acid, 1-hydroxy-2,5-dioxo- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 4 OF 21 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:637644 HCAPLUS
DOCUMENT NUMBER: 137:169324
TITLE: Process for preparation of halogeno alcohol derivatives from N-benzyloxycarbonyl-S-phenyl-L-cysteine
INVENTOR(S): Shimizu, Susumu; Sunagawa, Kazuhiko; Iwama, Hideki; Niimura, Koichi; Katohno, Masataka; Mizusawa, Shigeru
PATENT ASSIGNEE(S): Kureha Chemical Industry Company, Limited, Japan
SOURCE: PCT Int. Appl., 34 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002064553	A1	20020822	WO 2002-JP1267	20020214

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: JP 2001-37325 A 20010214
OTHER SOURCE(S): CASREACT 137:169324; MARPAT 137:169324
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

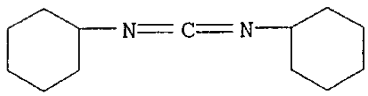
AB A process for prepn. of halogeno alc. derivs. represented by the general formula (I; X = halo) and novel useful intermediates are provided. Halogeno alcs. of the general formula I, i.e., (2S,3R)-N-Cbz-3-amino-1-halogeno-4-phenylsulfanylbutan-2-ol derivs. (Cbz = benzyloxycarbonyl), can be efficiently prepd. from a publicly known starting compd., i.e., N-Cbz-S-phenyl-L-cysteine, through novel active ester derivs. and novel ylide compd., i.e. dimethylsulfoxonium 3-benzyloxycarbonylamino-4-phenylthio-2-oxobutylide or 3-benzyloxycarbonylamino-1-(dimethylsulfoxonio)-4-phenylthio-2-butanone ylide, of the general formulas [II; Z = linear or branched C1-4 alkoxy, C1-4 alkylthio, (un)substituted phenoxy, phenylthio, benzyloxy, or benzylthio, pyridyloxy, pyridylthio, ethoxyvinyloxy, linear or branched C1-4 alkylcarbonyloxy, substituted phosphoric acid ester, substituted sulfuric acid ester, imidazolyl, N3, alkoxycarbonyloxy, cyclohexylcarbodimidoxy, succinimidoxy, phthalimidoxy, benzotriazolyloxy, piperidinooxy, halo] and (III) and halomethyl ketone intermediates of the general formula (IV; X = halo). The halogeno alcs. I are useful as intermediates for a HIV-protease inhibitor, [3S-(3.alpha.,4a.beta.,8a.beta.)]-2-[2-hydroxy-3-phenylthiomethyl-4-aza-5-oxo-5-(2-methyl-3-hydroxyphenyl)pentyl]decahydroisoquinoline-3-N-tert-butylcarboxamide (V). Thus, 9.94 g N-benzyloxycarbonyl-S-phenyl-L-cysteine was dissolved in 60 mL dioxane, and treated with 3.46 g N-hydroxysuccinimide, cooled to 4.degree. in ice-water, followed by adding 6.4 g DCC, and the resulting mixt. was stirred for 30 min at 7.degree. to give 98.4% N-benzyloxycarbonyl-S-phenyl-L-cysteine N-hydroxysuccinimide ester (VI). NaH (60%, 0.186 g) was washed twice with 5 mL hexane and suspended in 10 mL DMSO, followed by adding 1.03 g trimethylsulfoxonium iodide in portions, and the resulting mixt. was stirred for 10 min and heated at 55.degree. with stirring for 30 min to give a soln. of dimethylsulfoxonium methylide (Corey's reagent). To the soln. was added 10 mL THF, cooled to -12.degree., followed by adding a soln. of 1.0 g VI in 5 mL THF, and the resulting mixt. was stirred at -12.degree. for 1.75 h to give 83.6% III. III (0.78 g) was dissolved in 30 mL EtOAc, cooled to -20.degree., treated dropwise with 2.18 N HCl/EtOAc at -20.degree. in a **dry** ice-acetone bath, and warmed to -10.degree. over 1 h with stirring, warmed to room temp., and heated at 78.degree. for 20 min to give chloromethyl ketone IV (X = Cl). IV (X = Cl) (9.1 g) was added to a soln. of 3.08 g aluminum sec-butylate in 50 mL toluene with stirring at 17.degree., followed by adding 25 mL toluene, and the resulting mixt. was stirred for 4.5 h to give 96.7% I (X = Cl).

IC ICM C07C319-20
ICS C07C323-32; C07C381-12; C07B053-00

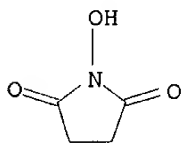
CC 25-19 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
Section cross-reference(s): 1

IT 79-37-8, Oxalyl chloride 100-02-7, p-Nitrophenol, reactions 100-51-6, Benzyl alcohol, reactions 100-53-8, Benzyl mercaptan 108-95-2, Phenol, reactions 108-98-5, Thiophenol, reactions 288-32-4, Imidazole, reactions 507-16-4, Thionyl bromide 524-38-9, N-Hydroxyphthalimide **538-75-0**, DCC 1774-47-6, Trimethylsulfoxonium iodide 2592-95-2, 1-Hydroxybenzotriazole 4421-54-9, Ethenone ethyl hemiacetal 4801-58-5, 1-Hydroxypiperidine **6066-82-6**, N-Hydroxysuccinimide 7719-09-7, Thionyl chloride 7782-79-8, Hydrogen azide 7791-25-5, Sulfuryl chloride 10025-87-3, Phosphorus oxychloride 10026-13-8, Phosphorus pentachloride 25596-24-1, Trimethylsulfoxonium bromide 27341-45-3, Pyridinol 29467-96-7, Pyridinethiol 159453-24-4, N-Benzyloxycarbonyl-S-phenyl-L-cysteine
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of (benzyloxycarbonylamino)halophenylthiobutanol from

N-benzyloxycarbonyl-S-phenyl-L-cysteine active ester)
IT **538-75-0**, DCC **6066-82-6**, N-Hydroxysuccinimide
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of (benzyloxycarbonylamino)halophenylthiobutanol from
N-benzyloxycarbonyl-S-phenyl-L-cysteine active ester)
RN 538-75-0 HCAPLUS
CN Cyclohexanamine, N,N'-methanetetraylbis- (9CI) (CA INDEX NAME)



RN 6066-82-6 HCAPLUS
CN 2,5-Pyrrolidinedione, 1-hydroxy- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 5 OF 21 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:595357 HCAPLUS
DOCUMENT NUMBER: 137:145650
TITLE: Dehydrated hydrogel precursor-based tissue adhesive compositions
INVENTOR(S): Sawhney, Amarpreet S.; Edelman, Peter G.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 8 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002106409	A1	20020808	US 2001-776120	20010202
WO 2002062276	A1	20020815	WO 2002-US3101	20020131

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
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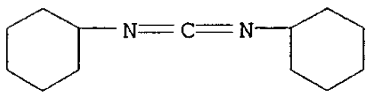
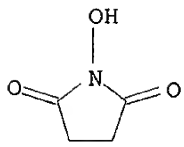
PRIORITY APPLN. INFO.: US 2001-776120 A 20010202
AB Compns. and methods are provided for forming tissue-adherent hydrogels

using substantially **dry** precursors. The dehydrated precursors are premixed prior to in situ therapy and utilize naturally-occurring body fluids as an aq. environment that initiates transformation, which causes dissoln. and nearly simultaneous crosslinking of the precursors, thus forming an insol. hydrogel implant. The dehydrated precursor-based hydrogels may be used as sealants for fluid leaks from tissue, as adherent drug delivery depots, as means for augmenting and/or supporting tissue, and as means for serving a variety of other useful medical and surgical purposes. A dehydrated adhesive compn. was formulated using two dehydrated hydrogel precursors. Precursor A consisted of polyethylene glycol amine, and precursor B consisted of polyethylene glycol extended with succinimidyl glutarate ester. The 2 precursors were mixed and ground together in a mortar and pestle until a smooth mixt. was obtained. This mix was termed Mixt. A. Mixt. B was created like Mixt. A, but with addnl. incorporation of human thrombin (500 Units) to the compn. A midline laparotomy was created in a hog under general anesthesia. The hog was given 50 mg/Kg Heparin to induce anticoagulation. Hemostasis was obtained in Mixt. A in 1 min, and in Mixt. B in 30 s,.

IC ICM A61K009-14
NCL 424484000
CC 63-7 (Pharmaceuticals)
IT Anti-infective agents
Biocompatibility
Coating materials
Crosslinking
Desolvation
Freeze **drying**
Human
Hydrogen bond
Molecular weight
Van der Waals force
(dehydrated hydrogel precursor-based tissue adhesive compns.)
IT **538-75-0**, Dicyclohexylcarbodiimide **6066-82-6**,
N-Hydroxysuccinimide
RL: RCT (Reactant); RACT (Reactant or reagent)
(dehydrated hydrogel precursor-based tissue adhesive compns.)
IT **538-75-0**, Dicyclohexylcarbodiimide **6066-82-6**,
N-Hydroxysuccinimide
RL: RCT (Reactant); RACT (Reactant or reagent)
(dehydrated hydrogel precursor-based tissue adhesive compns.)
RN 538-75-0 HCAPLUS
CN Cyclohexanamine, N,N'-methanetetraylbis- (9CI) (CA INDEX NAME)



RN 6066-82-6 HCAPLUS
CN 2,5-Pyrrolidinedione, 1-hydroxy- (9CI) (CA INDEX NAME)



L21 ANSWER 6 OF 21 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2002:269010 HCAPLUS
DOCUMENT NUMBER: 136:268201
TITLE: Processes for preparation of new collagen-based supports for tissue engineering and the resulting biomaterials
INVENTOR(S): Abdul, Malak Nabil; Andre, Valerie; Huc, Alain
PATENT ASSIGNEE(S): Coletica, Fr.
SOURCE: Fr. Demande, 43 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

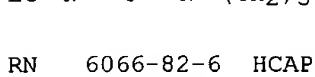
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2809313	A1	20011130	FR 2001-6899	20010525
FR 2809412	A1	20011130	FR 2000-6748	20000526
FR 2809314	A1	20011130	FR 2001-6919	20010528

PRIORITY APPLN. INFO.: FR 2000-6743 A 20000526
FR 2000-6748 A 20000526

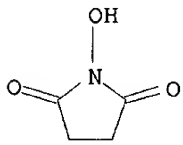
AB A composite product formed by a collagen support comprises a porous collagen layer coated on a collagen membrane made by **drying** a collagen gel in the air or a gas. One of the layers contains live normal or genetically-modified cells, or malignant cells. The composite is used as a support for making artificial skin. Human keratinocytes were cultured on the composite product prepd. according to above method for use as artificial skin.

IC ICM A61L027-24
ICS C12N005-08; A61L027-40; A61L027-56; A61L027-60
CC 63-7 (Pharmaceuticals)
IT 111-30-8DP, Glutaraldehyde, reaction products with collagens **1892-57-5DP**, reaction products with collagens **6066-82-6DP**, reaction products with collagens 26386-88-9DP, Diphenylphosphorylazide, reaction products with collagens
RL: DEV (Device component use); PNU (Preparation, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(processes for prepn. of new collagen-based supports for tissue engineering and resulting biomaterials)
IT **1892-57-5DP**, reaction products with collagens **6066-82-6DP**, reaction products with collagens
RL: DEV (Device component use); PNU (Preparation, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(processes for prepn. of new collagen-based supports for tissue engineering and resulting biomaterials)
RN 1892-57-5 HCAPLUS

CN 1,3-Propanediamine, N'-(ethylcarbonimidoyl)-N,N-dimethyl- (9CI) (CA INDEX NAME)



RN 6066-82-6 HCAPLUS
CN 2,5-Pyrrolidinedione, 1-hydroxy- (9CI) (CA INDEX NAME)



L21 ANSWER 7 OF 21 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2001:566844 HCAPLUS
DOCUMENT NUMBER: 135:129518
TITLE: Photographic material containing a scavenger-modified polymer
INVENTOR(S): Kluijtmans, Sebastianus Gerardus Johannes Maria; Bouwstra, Jan Bastiaan; Toda, Yuzo
PATENT ASSIGNEE(S): Fuji Photo Film B.V., Neth.
SOURCE: PCT Int. Appl., 31 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001055788	A1	20010802	WO 2001-NL53	20010126
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1122597	A1	20010808	EP 2000-200275	20000126
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
EP 1257876	A1	20021120	EP 2001-906418	20010126
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2003521007	T2	20030708	JP 2001-555270	20010126

PRIORITY APPLN. INFO.: EP 2000-200275 A 20000126
WO 2001-NL53 W 20010126

AB The invention is directed to the field of photog. materials contg. scavenger mols. that are applied into the intermediate interlayers between

sensitive emulsion layers. The photog. material comprises a photog. support and color sensitive recording layers on top of the support, the recording layers being sepd. from each other by interlayers, wherein the interlayers are characterized by the interlayer design parameter ([SC] d2) (wherein [SC] is the concn. scavenger moieties bound to the H2O sol. polymer applied in the interlayer per g total interlayer polymer and d the **dry** thickness of the interlayer) having a value larger than 2.0 10-15 m mol m2/g and a max. concn. [SC] of 0.5 m mol/g.

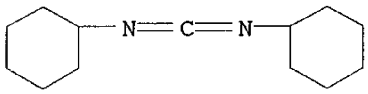
IC ICM G03C007-396
ICS G03C007-30

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

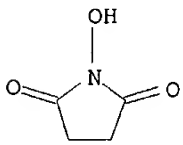
IT 490-79-9, 2,5_Dihydroxybenzoic acid **538-75-0**, Dicyclohexylcarbodiimide **6066-82-6**, N-Hydroxysuccinimide 9012-09-3, Triacetylcellulose 351210-15-6
RL: RCT (Reactant); TEM (Technical or engineered material use); RACT (Reactant or reagent); USES (Uses)
(synthesis of scavenger-modified gelatin for photog. material using)

IT **538-75-0**, Dicyclohexylcarbodiimide **6066-82-6**, N-Hydroxysuccinimide
RL: RCT (Reactant); TEM (Technical or engineered material use); RACT (Reactant or reagent); USES (Uses)
(synthesis of scavenger-modified gelatin for photog. material using)

RN 538-75-0 HCAPLUS
CN Cyclohexanamine, N,N'-methanetetraylbis- (9CI) (CA INDEX NAME)



RN 6066-82-6 HCAPLUS
CN 2,5-Pyrrolidinedione, 1-hydroxy- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 8 OF 21 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2000:573897 HCAPLUS
DOCUMENT NUMBER: 133:174260
TITLE: Luminescent metal-ligand complexes
INVENTOR(S): Terpetschnig, Ewald A.; Yang, Dan-hui; Owicki, John C.
PATENT ASSIGNEE(S): Ljl Biosystems, Inc., USA
SOURCE: PCT Int. Appl., 76 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 22

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000047693	A1	20000817	WO 2000-US3589	20000211
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6258326	B1	20010710	US 1998-156318	19980918
US 2001021514	A1	20010913	US 2001-767583	20010122
WO 2002035260	A3	20021024	WO 2001-US46411	20011029
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.:	US 1999-119884P	P	19990212
	US 1999-165813P	P	19991116
	US 1997-59640P	P	19970920
	US 1998-85500P	P	19980514
	US 1998-89848P	P	19980619
	WO 2000-US3589	A1	20000211
	US 2000-244012P	P	20001027

OTHER SOURCE(S): MARPAT 133:174260

AB Compns. are described which comprise photoluminescent metal-ligand complexes having a high intrinsic fundamental polarization which are described by the general formulas B-M-L-R1 or R2(R3)M(E1)E2 (M = a long-lifetime luminophor, esp. Ru, Os, or Rh; L = independently selected -C(:O)-(O)m-Q1 groups; m = 0 or 1; Q = alkyl or aryl; R1 = -N:C:S or -NH-C(:S)-NH-P'; R2, R3 = -N:C:S, L-N:C:S, -NH-C(:S)-NH-P', or L-NH-C(:S)-NH-P' for which the L groups are selected independently; P' = proteins, polynucleotides, antibodies, beads, and solid supports; E1 = an electron-withdrawing group; and E2 = H or an electron-withdrawing group). Use in luminescence assays is indicated. The complexes and/or acceptors may be used in free, reactive, and/or conjugated form, alone or mixed with other compds. Preferred luminescence assays include luminescence polarization and luminescence resonance energy transfer assays, among others.

IC ICM C09K011-06
ICS C07F013-00; C07F017-02; C07F017-00

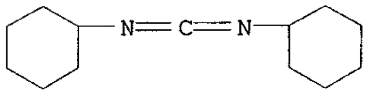
CC 9-5 (Biochemical Methods)
Section cross-reference(s): 15, 73

IT 100-02-7, p-Nitrophenol, reactions 143-66-8, Sodium tetraphenylborate 463-71-8, Thiophosgene **538-75-0**, 1,3-Dicyclohexylcarbodiimide 590-97-6, Bromomethylacetate 631-61-8, Ammonium acetate 983-80-2, cis-1,2-Bis(diphenylphosphino)ethylene 1134-35-6, 4,4'-Dimethyl-2,2'-

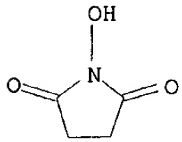
bipyridine 2353-45-9, Fast green FCF 4199-88-6, 5-Nitro-1,10-phenanthroline **6066-82-6**, N-Hydroxysuccinimide 6153-92-0, 4,4'-Diphenyl-2,2'-bipyridine 6160-65-2, Thiocarbonyldiimidazole 6813-38-3, 4,4'-Dicarboxyl-2,2'-bipyridine 7719-09-7, Thionyl chloride 7803-57-8, Hydrazine **hydrate** 10049-08-8, Ruthenium trichloride 12125-08-5 15746-57-3, Bis(2,2'-bipyridyl)ruthenium dichloride 16941-11-0, Ammonium hexafluorophosphate 26690-80-2 52746-49-3, Bathophenanthroline disulfonic acid disodium salt 71071-46-0 105832-38-0, O-(N-Succinimidyl)-N,N,N'N'-tetramethyluronium tetrafluoroborate 288396-48-5
RL: RCT (Reactant); RACT (Reactant or reagent)
(luminescent metal-ligand complexes)

IT **538-75-0**, 1,3-Dicyclohexylcarbodiimide **6066-82-6**, N-Hydroxysuccinimide
RL: RCT (Reactant); RACT (Reactant or reagent)
(luminescent metal-ligand complexes)

RN 538-75-0 HCAPLUS
CN Cyclohexanamine, N,N'-methanetetraylbis- (9CI) (CA INDEX NAME)



RN 6066-82-6 HCAPLUS
CN 2,5-Pyrrolidinedione, 1-hydroxy- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 9 OF 21 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2000:513898 HCAPLUS
DOCUMENT NUMBER: 133:101746
TITLE: Simple method for labeled conjugate production using N-hydroxysuccinimide and phase changes to control the reaction
INVENTOR(S): Morseman, John P.; Zeng, Xiangfei
PATENT ASSIGNEE(S): Martek Biosciences Corporation, USA
SOURCE: PCT Int. Appl., 35 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000043784	A1	20000727	WO 2000-US1350	20000121

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

CA 2359234 AA 20000727 CA 2000-2359234 20000121

EP 1145007 A1 20011017 EP 2000-903358 20000121

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

JP 2002535657 T2 20021022 JP 2000-595154 20000121

PRIORITY APPLN. INFO.: US 1999-116689P P 19990122 60/ this applicn.

WO 2000-US1350 W 20000121

AB The present invention relates to methods for coupling labels to particular target moieties. The coupling reactions of the present invention use temporal spacing of the reactants through phase change (i.e. by rapid freezing) to control the initiation and termination of reaction. This process results in a simplified and improved method for linking labels to specific binding moieties using N-hydroxysuccinimide chem. The present invention further relates to kits comprising all necessary components to easily and rapidly make protein conjugates. Phycoerythrin was conjugated to streptavidin via EDAC/sulfo-NHS from a freeze **dried** reagent where D-(+)-trehalose was used.

IC ICM G01N033-532

CC 9-14 (Biochemical Methods)

IT Containers

(contg. **dried** labeling components; simple method for labeled conjugate prodn. using N-hydroxysuccinimide and phase changes to control reaction)

IT 541-59-3D, Maleimide, compds. **1892-57-5**, 1-Ethyl-3-(3-dimethylaminopropyl)carbodiimide **6066-82-6**, N-Hydroxysuccinimide 9013-20-1, Streptavidin **82436-78-0**, N-Hydroxysulfosuccinimide

RL: PEP (Physical, engineering or chemical process); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)

(simple method for labeled conjugate prodn. using N-hydroxysuccinimide and phase changes to control reaction)

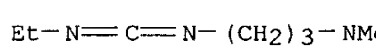
IT **1892-57-5**, 1-Ethyl-3-(3-dimethylaminopropyl)carbodiimide **6066-82-6**, N-Hydroxysuccinimide **82436-78-0**, N-Hydroxysulfosuccinimide

RL: PEP (Physical, engineering or chemical process); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)

(simple method for labeled conjugate prodn. using N-hydroxysuccinimide and phase changes to control reaction)

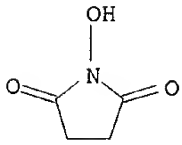
RN 1892-57-5 HCAPLUS

CN 1,3-Propanediamine, N'-(ethylcarbonimidoyl)-N,N-dimethyl- (9CI) (CA INDEX NAME)

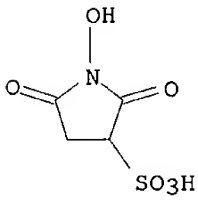


RN 6066-82-6 HCAPLUS

CN 2,5-Pyrrolidinedione, 1-hydroxy- (9CI) (CA INDEX NAME)



RN 82436-78-0 HCAPLUS
CN 3-Pyrrolidinesulfonic acid, 1-hydroxy-2,5-dioxo- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 10 OF 21 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2000:368285 HCAPLUS
DOCUMENT NUMBER: 133:4458
TITLE: Amphiphilic polyamine compounds as gene transfection promoting agents
INVENTOR(S): Felgner, Philip L.; Gao, Xiang; Ling, Jing
PATENT ASSIGNEE(S): Gene Therapy Systems, Inc., USA
SOURCE: PCT Int. Appl., 36 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000031022	A1	20000602	WO 1999-US27737	19991124
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1133465	A1	20010919	EP 1999-961766	19991124
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 6348499	B1	20020219	US 1999-448876	19991124
JP 2002530364	T2	20020917	JP 2000-583850	19991124
US 6433017	B1	20020813	US 2001-796340	20010228

PRIORITY APPLN. INFO.: US 1998-110020P P 19981125

US 1998-111078P P 19981204
US 1999-448876 A3 19991124
WO 1999-US27737 W 19991124

OTHER SOURCE(S): MARPAT 133:4458

AB Amphiphilic polyamine compds. and derivs. thereof having the property of promoting transfection of polynucleotides and polypeptides into cells, and formulations comprising said compds. and a co-lipid, are disclosed. The polyamine compds. are preferably polyamidine compds., particularly lysine polyamidine compds., and the co-lipid are either phospholipid or a Rosenthal inhibitor ester or its deriv. Amphiphilic lysine polyamidine compds. and various derivs. with amine protecting groups were synthesized. These compds. showed higher gene transfection activities in mammalian cells than LipofectAMINE.

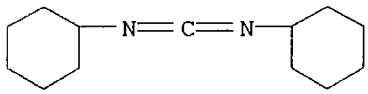
IC ICM C07C237-22
ICS C12N015-88; A61K048-00; C07C217-22; C07C217-20; C07C311-19; C07C311-64

CC 23-18 (Aliphatic Compounds)
Section cross-reference(s): 3

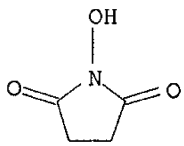
IT 76-05-1, Trifluoro acetic acid, reactions 107-13-1, 2-Propenenitrile, reactions 112-99-2, Dioctadecylamine 121-44-8, reactions **538-75-0**, Dicyclohexylcarbodiimide 2389-45-9 2389-60-8D, DCC and NHS activated 2592-95-2D, 1-Hydroxybenzotriazole, **hydrate 6066-82-6**, N-Hydroxysuccinimide 13836-37-8 25952-53-8, N-(3-Dimethylaminopropyl)-N'-ethylcarbodiimide hydrochloride 29843-07-0 30189-36-7 34695-46-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(amphiphilic polyamine compds. as gene transfection promoting agents)

IT **538-75-0**, Dicyclohexylcarbodiimide **6066-82-6**, N-Hydroxysuccinimide
RL: RCT (Reactant); RACT (Reactant or reagent)
(amphiphilic polyamine compds. as gene transfection promoting agents)

RN 538-75-0 HCAPLUS
CN Cyclohexanamine, N,N'-methanetetraylbis- (9CI) (CA INDEX NAME)



RN 6066-82-6 HCAPLUS
CN 2,5-Pyrrolidinedione, 1-hydroxy- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 11 OF 21 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1999:672621 HCAPLUS
DOCUMENT NUMBER: 131:298659

TITLE: Inhibition of xenoreactive antibodies
INVENTOR(S): Schwarz, Alexander; Davis, Thomas A.; Diamond, Lisa E.; Logan, John S.; Byrne, Guerard W.
PATENT ASSIGNEE(S): Baxter International Inc., USA
SOURCE: PCT Int. Appl., 148 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9952561	A1	19991021	WO 1999-US8326	19990415
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2326618	AA	19991021	CA 1999-2326618	19990415
AU 9935645	A1	19991101	AU 1999-35645	19990415
AU 761831	B2	20030612		
EP 1087791	A1	20010404	EP 1999-917553	19990415
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
JP 2002511431	T2	20020416	JP 2000-543171	19990415

PRIORITY APPLN. INFO.: US 1998-60525 A 19980415
WO 1999-US8326 W 19990415

AB One aspect of the present invention relates to methods and compns. for attenuating xenograft rejection by administering, to an animal receiving the xenograft, an amt. of a polymer-derivatized xenoantigen (hereinafter "xenopolymer") effective for inhibiting or lessening the severity of hyperacute rejection response (HAR), or other immunol. response to the graft, that is dependent on the presence of the xenoantigen on the grafted tissues or cells. In certain embodiments, the xenopolymer is administered in an amt. sufficient to neutralize host antibodies ("xenoreactive antibodies" or "XNA") immunoreactive with the xenoantigen. The xenopolymer may addnl., or alternatively, be used as a tolerogen (or anergen) for the xenoantigen, e.g., able to suppress, to some degree, the prodn./secretion of XNAs by the immune system of the host.

IC ICM A61K047-48
ICS A61K031-70
CC 15-2 (Immunochemistry)
IT Amide group
Amino group
Baboon
Blood
Blood plasma
Buffers
Carboxyl group
Cross-coupling reaction
Crosslinking agents
Culture media
Drug delivery systems

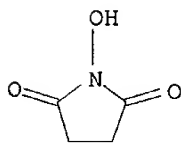
Drying agents
Epitopes
Formyl group
Functional groups
Macaca irus
Phosphate group
Polydispersity
Primate
Swine
Test kits
Transplant and Transplantation
Transplant rejection
(prepn. of polymer-derivatized xenoantigen for attenuating xenograft rejection)

IT **6066-82-6**, N-Hydroxysuccinimide
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of polymer-derivatized xenoantigen for attenuating xenograft rejection)

IT **538-75-0**, Dicyclohexyldiimide 25322-68-3 25952-53-8, EDC
82436-78-0, N-Hydroxysulfosuccinimide
RL: RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
(prepn. of polymer-derivatized xenoantigen for attenuating xenograft rejection)

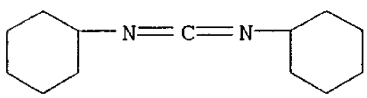
IT **6066-82-6**, N-Hydroxysuccinimide
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of polymer-derivatized xenoantigen for attenuating xenograft rejection)

RN 6066-82-6 HCAPLUS
CN 2,5-Pyrrolidinedione, 1-hydroxy- (9CI) (CA INDEX NAME)

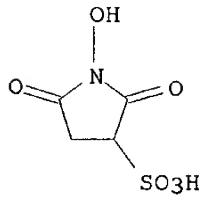


IT **538-75-0**, Dicyclohexyldiimide **82436-78-0**, N-Hydroxysulfosuccinimide
RL: RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
(prepn. of polymer-derivatized xenoantigen for attenuating xenograft rejection)

RN 538-75-0 HCAPLUS
CN Cyclohexanamine, N,N'-methanetetraylbis- (9CI) (CA INDEX NAME)



RN 82436-78-0 HCAPLUS
CN 3-Pyrrolidinesulfonic acid, 1-hydroxy-2,5-dioxo- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

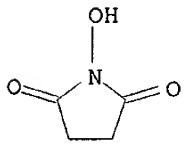
L21 ANSWER 12 OF 21 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1999:139773 HCAPLUS
DOCUMENT NUMBER: 130:200953
TITLE: A method of crosslinking collagen-based material and bioprosthetic devices produced therefrom
INVENTOR(S): Hendriks, Marc; Verhoeven, Michel; Cahalan, Patrick T.; Torrianni, Mark W.; Fouache, Benedicte; Cahalan, Linda
PATENT ASSIGNEE(S): Medtronic, Inc., USA
SOURCE: Eur. Pat. Appl., 26 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 897942	A1	19990224	EP 1998-306595	19980818
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 6166184	A	20001226	US 1997-912778	19970818

PRIORITY APPLN. INFO.: US 1997-912778 A 19970818

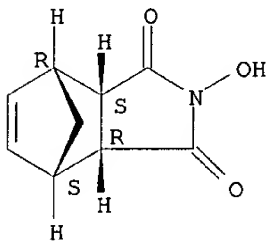
AB Methods of crosslinking collagen-based material having collagen amine groups and collagen carboxyl groups are provided. The methods comprise blocking at least a portion of the collagen amine groups with a blocking agent to form blocked amine groups; contacting the collagen-based material having the blocked amine groups with a polyfunctional spacer; and activating at least a portion of the collagen carboxyl groups after blocking at least a portion of the collagen amine groups, wherein the polyfunctional spacer crosslinks the collagen-based material and wherein said contacting step may be effected before or after said activating step. Bioprosthetic devices made from these crosslinked collagen-based materials are also provided. Crosslinking involving the JEFFAMINE spacers shows the fastest **rehydration**, whereas glutaraldehyde crosslinking tends to be a bit slower. The highly hydrophilic crosslinked collagen-derived materials promote infiltration and diffusion of tissue fluid through the material matrix, providing supply of oxygen, nutritive substances, electrolytes and drainage of metabolites. Also, ingrowth of capillary blood vessels and cells is promoted, 25 and consequently the healing response is improved. In addn., hydrophilicity improves the blood compatibility of the material. Collagen samples crosslinked according to the method of the invention involving the Jeffamine D230 spacer had a cell growth inhibition of 25%, while cells with a deviant morphol. were not

obsd.
IC ICM C08H001-06
ICS A61L027-00
CC 63-7 (Pharmaceuticals)
Section cross-reference(s): 45
IT 1122-58-3, 4-Dimethylaminopyridine 2592-95-2, N-Hydroxybenzotriazole **6066-82-6**, N-Hydroxysuccinimide **39743-84-5**
RL: NUU (Other use, unclassified); USES (Uses)
(crosslinking collagen-based material for bioprosthetic devices manuf.)
IT 66-25-1, Hexanal 111-30-8, Glutaraldehyde 123-38-6, Propanal, reactions 123-72-8, Butanal 420-04-2, Cyanamide **530-62-1**, 1,1'-Carbonyldiimidazole **538-75-0**, N,N'-Dicyclohexylcarbodiimide 616-02-4, Citraconic anhydride **693-13-0**, N,N'-Diisopropylcarbodiimide 830-03-5, p-Nitrophenyl acetate 1865-01-6, p-Nitrophenyl formate 2466-76-4, 1-Acetylimidazole **2491-17-0** 2635-84-9, p-Nitrophenyl butyrate **6066-82-6D**, N-Hydroxysuccinimide, esters 9046-10-0, Jeffamine D 230 14464-29-0, N-Hydroxysuccinimidyl acetate 16357-59-8, 2-Ethoxy-1-ethoxycarbonyl-1,2-dihydroquinoline 25952-53-8, 1-Ethyl-3-(3-dimethylaminopropyl)carbodiimide hydrochloride 30364-55-7 74124-79-1, N,N'-Disuccinimidyl carbonate 94820-31-2 152305-87-8
RL: NUU (Other use, unclassified); RCT (Reactant); RACT (Reactant or reagent); USES (Uses)
(crosslinking collagen-based material for bioprosthetic devices manuf.)
IT **6066-82-6**, N-Hydroxysuccinimide **39743-84-5**
RL: NUU (Other use, unclassified); USES (Uses)
(crosslinking collagen-based material for bioprosthetic devices manuf.)
RN 6066-82-6 HCAPLUS
CN 2,5-Pyrrolidinedione, 1-hydroxy- (9CI) (CA INDEX NAME)



RN 39743-84-5 HCAPLUS
CN 4,7-Methano-1H-isoindole-1,3(2H)-dione, 3a,4,7,7a-tetrahydro-2-hydroxy-, (3aR,4S,7R,7aS)-rel- (9CI) (CA INDEX NAME)

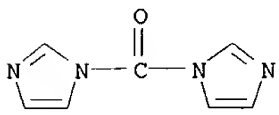
Relative stereochemistry.



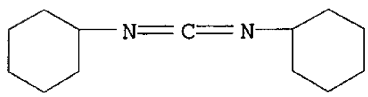
IT **530-62-1**, 1,1'-Carbonyldiimidazole **538-75-0**, N,N'-Dicyclohexylcarbodiimide **693-13-0**, N,N'-

Diisopropylcarbodiimide **2491-17-0 6066-82-6D,**
N-Hydroxysuccinimide, esters
RL: NUU (Other use, unclassified); RCT (Reactant); RACT (Reactant or reagent); USES (Uses)
(crosslinking collagen-based material for bioprosthetic devices manuf.)

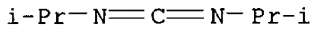
RN 530-62-1 HCAPLUS
CN 1H-Imidazole, 1,1'-carbonylbis- (9CI) (CA INDEX NAME)



RN 538-75-0 HCAPLUS
CN Cyclohexanamine, N,N'-methanetetraylbis- (9CI) (CA INDEX NAME)



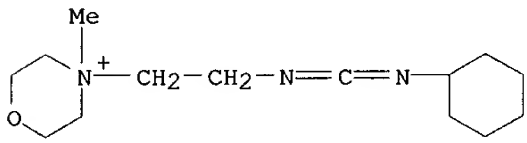
RN 693-13-0 HCAPLUS
CN 2-Propanamine, N,N'-methanetetraylbis- (9CI) (CA INDEX NAME)



RN 2491-17-0 HCAPLUS
CN Morpholinium, 4-[2-[(cyclohexylcarbonimidoyl)amino]ethyl]-4-methyl-, salt with 4-methylbenzenesulfonic acid (1:1) (9CI) (CA INDEX NAME)

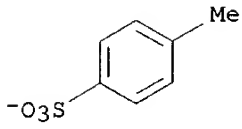
CM 1

CRN 20702-21-0
CMF C14 H26 N3 O

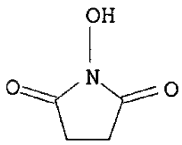


CM 2

CRN 16722-51-3
CMF C7 H7 O3 S



RN 6066-82-6 HCAPLUS
CN 2,5-Pyrrolidinedione, 1-hydroxy- (9CI) (CA INDEX NAME)

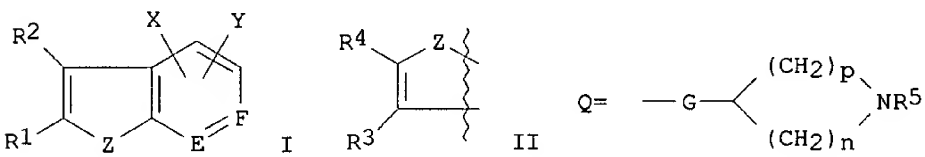


REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 13 OF 21 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1998:724203 HCAPLUS
DOCUMENT NUMBER: 130:38288
TITLE: Preparation of condensed ring aromatic compounds and dopamine receptor D4 antagonists containing the compounds for treatment of schizophrenia
INVENTOR(S): Takada, Susumu; Fukui, Kiichi; Sasatani, Takashi
PATENT ASSIGNEE(S): Shionogi and Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 91 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10298180	A2	19981110	JP 1997-108832	19970425

PRIORITY APPLN. INFO.: JP 1997-108832 19970425
OTHER SOURCE(S): MARPAT 130:38288
GI



AB The arom. compds. I or II [Z = O, S; R1-R4 = H, linear or branched C1-6 alkyl, C3-8 cycloalkyl, C1-3 haloalkyl, halo; R1R2 or R3R4 may form (CH2)m (m = 2-4); E, F = N, (X- or Y-substituted) CH; X = linear or branched C1-6 alkoxy, C3-8 cycloalkoxy, C3-8 cycloalkoxy-substituted linear or branched

C1-3 alkoxy; Y = Q; G = CONH, CO2, NHCO, O2C; R5 = (un)substituted linear or branched C1-6 alkyl, C3-8 cycloalkyl, C7-12 spiroalkyl, aryl, etc.; n, p = 1-3; the (CH2)n and (CH2)p may be substituted; E = F .noteq. N; (n + p) .ltoreq.5], their optical isomers, their pharmacol. acceptable salts, or their **hydrates** are prepd. Dopamine D4 receptor antagonists contg. I or II are also claimed. The antagonists are useful for treatment of schizophrenia without causing extrapyramidal symptoms or affecting endocrine function. Amidation of 6-methoxy-2-methylbenzo[b]thiophene-5-carboxylic acid with (3S)-3-amino-1-cyclohexylpyrrolidine gave the corresponding amide with 35% yield, which had Ki 140 and 0.17 nM in binding assay of dopamine D2 and D4 receptor assay, resp.

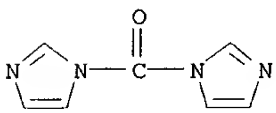
IC ICM C07D409-12
ICS C07D409-12; A61K031-33; A61K031-38; A61K031-40; A61K031-44; A61K031-445; C07D333-52; C07D409-14; C07D495-04; C07D307-78; C07D307-87

CC 27-8 (Heterocyclic Compounds (One Hetero Atom))
Section cross-reference(s): 1, 28, 63

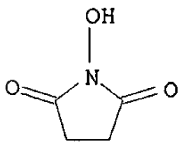
IT 78-88-6, 2,3-Dichloropropene **530-62-1** 545-06-2, Trichloroacetonitrile 775-15-5, 1-Benzyl-3-pyrrolidinol 5279-03-8 5731-18-0 **6066-82-6**, N-Hydroxysuccinimide 7252-83-7, Bromoacetaldehyde dimethylacetal 18471-40-4, 3-Amino-1-benzylpyrrolidine 26386-88-9, Diphenylphosphoryl azide 53299-66-4 83179-09-3 120930-11-2 216489-69-9 216490-30-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of condensed ring arom. compds. as dopamine D4 receptor antagonists for treatment of schizophrenia)

IT **530-62-1 6066-82-6**, N-Hydroxysuccinimide
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of condensed ring arom. compds. as dopamine D4 receptor antagonists for treatment of schizophrenia)

RN 530-62-1 HCAPLUS
CN 1H-Imidazole, 1,1'-carbonylbis- (9CI) (CA INDEX NAME)



RN 6066-82-6 HCAPLUS
CN 2,5-Pyrrolidinedione, 1-hydroxy- (9CI) (CA INDEX NAME)



L21 ANSWER 14 OF 21 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1997:533559 HCAPLUS
DOCUMENT NUMBER: 127:195537
TITLE: Preparation of biological material for implants
INVENTOR(S): Lee, John Michael

PATENT ASSIGNEE(S): Lee, John Michael, Can.
SOURCE: PCT Int. Appl., 36 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9727885	A1	19970807	WO 1997-CA56	19970128
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2168283	AA	19970730	CA 1996-2168283	19960129
AU 9714340	A1	19970822	AU 1997-14340	19970128

PRIORITY APPLN. INFO.: CA 1996-2168283 19960129
WO 1997-CA56 19970128

OTHER SOURCE(S): MARPAT 127:195537

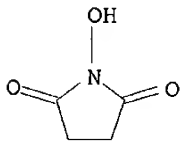
AB A method for prepn. of biol. material for a medical device is disclosed. Samples of intact or acellular tissue of biol. material are treated in vitro with (1) a water-sol. carbodiimide R1-N=C=N-R2 (R1, R2 = alkyl, alkylamino), in combination with (2) an agent that forms a stable activated ester with said carbodiimide. The agent to stabilize the activated esters is preferably N-hydroxysuccinimide (I) or N-hydroxysulfosuccinimide. The preferred carbodiimide is 1-ethyl-3-(dimethylaminopropyl)-carbodiimide (II). The method reduces inflammatory reactions of xenografts. Caprine carotid arteries was cut into pieces having a length of 5-6 cm and treated with a soln. of I:II (1:2) for a period of 24 h, then defatted and freeze-**dried**. Trypsin was added at a 1:10 enzyme to tissue ratio and samples were then incubated at 37.degree. for 48 h, then centrifuged for 30 min and the solubilized fraction was removed. The amt. of mass remaining after enzymic degrdn. (being a measure of the resistance of tissue to enzymic digestion) was 83.5 as compared to 21.4% for the untreated controls.

IC ICM A61L027-00
CC 63-7 (Pharmaceuticals)
Section cross-reference(s): 9
IT **1892-57-5**, 1-Ethyl-3-(dimethylaminopropyl)-carbodiimide.
6066-82-6, N-Hydroxysuccinimide **82436-78-0**,
N-Hydroxysulfosuccinimide.
RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of biol. material for implants)
IT **1892-57-5**, 1-Ethyl-3-(dimethylaminopropyl)-carbodiimide.
6066-82-6, N-Hydroxysuccinimide **82436-78-0**,
N-Hydroxysulfosuccinimide.
RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of biol. material for implants)
RN 1892-57-5 HCAPLUS
CN 1,3-Propanediamine, N'-(ethylcarbonimidoyl)-N,N-dimethyl- (9CI) (CA INDEX

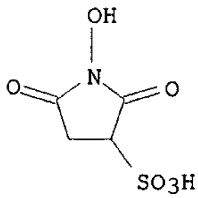
NAME)

Et−N═C═N−(CH2)3−NMe2

RN 6066-82-6 HCAPLUS
CN 2,5-Pyrrolidinedione, 1-hydroxy- (9CI) (CA INDEX NAME)



RN 82436-78-0 HCAPLUS
CN 3-Pyrrolidinesulfonic acid, 1-hydroxy-2,5-dioxo- (9CI) (CA INDEX NAME)



L21 ANSWER 15 OF 21 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1996:333008 HCAPLUS
DOCUMENT NUMBER: 125:127644
TITLE: Method for obtaining improved image contrast in migration imaging members
INVENTOR(S): Limburg, William W.; Mammino, Joseph; Liebermann, George; Griffiths, Clifford H.; Shahin, Michael M.; Malhotra, Shadi L.; Chen, Liqin; Perron, Marie-Eve
PATENT ASSIGNEE(S): Xerox Corp., USA
SOURCE: U.S., 147 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5514505	A	19960507	US 1995-441360	19950515
CA 2169980	AA	19961116	CA 1996-2169980	19960221
CA 2169980	C	20010424		
JP 08314240	A2	19961129	JP 1996-113456	19960508
EP 743573	A2	19961120	EP 1996-303359	19960514
EP 743573	A3	19970305		
EP 743573	B1	20000906		
R: DE, FR, GB				

PRIORITY APPLN. INFO.: US 1995-441360 A 19950515
OTHER SOURCE(S): MARPAT 125:127644
AB Disclosed is a process which comprises (a) providing a migration imaging member comprising (1) a substrate and (2) a softenable layer comprising a softenable material and a photosensitive migration marking material present in the softenable layer as a monolayer of particles situated at or near the surface of the softenable layer spaced from the substrate, (b) uniformly charging the imaging member, (c) imagewise exposing the charged imaging member to activating radiation at a wavelength to which the migration marking material is sensitive, (d) causing the softenable material to soften and enabling a first portion of the migration marking material to migrate through the softenable material toward the substrate in an imagewise pattern while a second portion of the migration marking material remains substantially unmigrated within the softenable layer, and (e) contacting the second portion of the migration marking material with a transparentizing agent which transparentizes the migration marking material.
IC ICM G03G017-10
NCL 430041000
CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT 1484-84-0, 2-Piperidineethanol 1497-17-2 1497-19-4 1499-17-8 1502-06-3, Cyclodecanone 1530-32-1, Ethyl triphenylphosphonium bromide 1530-45-6, Carbethoxymethyl triphenylphosphonium bromide 1530-89-8, 4-Morpholinecarbonitrile 1560-54-9, Allyltriphenylphosphonium bromide 1572-10-7, 3-Amino-5-phenylpyrazole 1603-91-4, 2-Amino-4-methylthiazole 1614-12-6, 1-Aminobenzotriazole 1631-25-0 1631-26-1 1632-73-1, Fenchyl alcohol 1632-83-3, 1-Methylbenzimidazole 1633-83-6 1640-39-7, 2,3,3-Trimethylindolenine 1641-40-3 1643-19-2, Tetrabutylammonium bromide 1670-81-1, Indole-5-carboxylic acid 1672-48-6, 6-Amino-5-nitroso-2-thiouracil 1677-27-6, 3H-1,2-Benzodithiol-3-one 1696-20-4, 4-Acetylmorpholine 1722-10-7, 3-Chloro-6-methoxypyridazine 1722-12-9, 2-Chloropyrimidine 1725-03-7, Oxacyclododecan-2-one 1746-03-8, Vinylphosphonic acid 1750-12-5, 4-Amino-3-hydrazino-5-mercapto-1,2,4-triazole 1759-28-0, 4-Methyl-5-vinylthiazole 1774-47-6, Trimethylsulfoxonium iodide 1779-48-2, Phenylphosphinic acid 1779-49-3, Methyl triphenylphosphonium bromide 1779-51-7 1779-58-4, Carbomethoxymethyl triphenylphosphonium bromide 1779-81-3, 2-Amino-2-thiazoline 1780-40-1, 2,4,5,6-Tetrachloropyrimidine 1809-21-8, Dipropylphosphite 1811-28-5 1812-53-9, Dicetyl dimethyl ammonium chloride 1820-80-0, 3-Aminopyrazole 1821-52-9, 3-Indolelactic acid 1835-65-0, Tetrafluorophthalonitrile 1846-76-0, Ethyl-3-coumarincarboxylate 1910-42-5, 1,1'-Dimethyl-4,4'-bipyridinium dichloride 1941-19-1, Tetramethylphosphonium chloride 1941-30-6, Tetrapropyl ammonium bromide 1953-54-4, 5-Hydroxyindole 2001-45-8, Tetraphenylphosphonium chloride 2002-59-7 2024-83-1, 3,4-Dimethoxybenzonitrile 2033-24-1, 2,2-Dimethyl-1,3-dioxane-4,6-dione 2065-66-9, Methyl triphenylphosphonium iodide 2065-67-0, Tetraphenylphosphonium iodide 2075-45-8, 4-Bromopyrazole 2085-33-8 2091-46-5, Propargyltriphenylphosphonium bromide 2114-02-5 2124-55-2, Indole-4-carboxylic acid 2127-03-9, Aldrithiol-2 2133-40-6 2138-24-1, Tetrahexyl ammonium iodide 2142-01-0 2164-83-2, 4,6-Dihydroxy-5-nitropyrimidine 2170-03-8, Itaconic anhydride 2179-57-9, Allyldisulfide 2181-42-2, Trimethylsulfonium iodide 2181-44-4, Trimethylsulfonium methylsulfate 2213-43-6, 1-Aminopiperidine 2218-94-2, Nitron 2232-08-8 2234-26-6, 2-Norbornanecarbonitrile 2235-00-9 2254-94-6, 3-Methylbenzothiazole-2-thione 2292-53-7,

Mandelohydroxamic acid 2295-31-0, 2,4-Thiazolidinedione 2301-80-6, 1,4-Dimethylpyridinium iodide 2304-30-5, Tetrabutylphosphonium chloride 2328-12-3, 6,7-Dimethoxy-1,2,3,4-tetrahydroisoquinoline hydrochloride 2349-67-9, 5-Amino-1,3,4-thiadiazole-2-thiol 2380-94-1, 4-Hydroxyindole 2382-79-8 2386-25-6, 3-Acetyl-2,4-dimethylpyrrole 2390-68-3, Didecyl dimethyl ammonium bromide 2426-02-0, 3,4,5,6-Tetrahydrophthalic anhydride 2434-53-9, 6-Amino-1-methyluracil 2456-81-7, 4-Pyrrolidinopyridine 2466-09-3, Pyrophosphoric acid 2466-76-4, 1-Acetylimidazole 2472-13-1, 6,7-Dimethoxy-2-tetralone **2491-17-0** 2524-67-6, 4-Morpholinoaniline 2547-66-2, 1,3,5-Tribenzylhexahydro-1,3,5-triazine 2556-73-2 2620-50-0, Piperonyl amine 2622-14-2, Tricyclohexylphosphine 2637-37-8, 2-Quinolinethiol 2645-22-9, Aldrithiol-4 2683-82-1 2700-22-3, Benzylidenemalononitrile 2740-94-5, 1-Benzyl-3-methyl-2-thiourea 2751-90-8, Tetraphenylphosphonium bromide 2758-06-7, 2-Bromoethyl trimethyl ammonium bromide 2759-28-6, 1-Benzylpiperazine 2761-13-9 2763-96-4, Muscimol 2782-91-4, 1,1,3,3-Tetramethyl-2-thiourea 2784-27-2, 5-(4-Hydroxyphenyl)-5-phenyl hydantoin 2825-83-4 2851-95-8, 2-Methyl-1-vinylimidazole 2892-62-8 2938-48-9, 2,2-Dimethylglutaric anhydride 2963-78-2, Butyrylcholine chloride 2973-09-3 3001-63-6, QUAB 426 3009-13-0, 1-(3-Nitrobenzyloxymethyl)pyridinium chloride 3010-24-0, M_QUAT 32 3012-37-1, Benzylthiocyanate 3073-77-6, 2-Amino-5-nitropyrimidine 3085-79-8, Methyl tributyl ammonium iodide 3100-36-5, 8-Cyclohexadecen-1-one 3112-31-0, 3,5-Pyrazoledicarboxylic acid 3115-68-2, Tetrabutylphosphonium bromide 3119-93-5, 3-Ethyl-2-methylbenzothiazolium iodide 3140-73-6, 2-Chloro-4,6-dimethoxy-1,3,5-triazine 3162-29-6, 3',4'-(Methylenedioxy)acetophenone 3189-43-3, Tetracyanoethylene oxide 3194-55-6, 1,2,5,6,9,10-Hexabromocyclododecane 3205-94-5, 1-Cyclopentene-1,2-dicarboxylic anhydride 3232-84-6, Urazole 3237-50-1, Alloxan monohydrate 3251-69-2, 4-Imidazoleacetic acid hydrochloride 3323-73-7, 1-Benzyl-3-hydroxypyridinium chloride 3343-41-7, 2-Pyridyl hydroxymethanesulfonic acid 3350-30-9, Cyclononanone 3363-56-2 3397-62-4 3398-16-1, 4-Bromo-3,5-dimethylpyrazole 3399-67-5, 2-Aminoethyl trimethyl ammonium chloride hydrochloride 3419-32-7, Ethyl-6-methyl-2-oxo-3-cyclohexene-1-carboxylate 3433-37-2, 2-Piperidinemethanol 3438-48-0, 4-Phenylpyrimidine 3485-84-5 3493-12-7, (3-Amino-3-carboxypropyl)dimethylsulfonium chloride 3505-67-7, 1,6-Dioxaspiro[4.4]nonane-2,7-dione 3528-17-4, Thiochroman-4-one 3528-58-3, 5-Amino-1-ethylpyrazole 3607-17-8, 3-Bromopropyl triphenylphosphonium bromide 3641-13-2 3647-69-6, 4-(2-Chloroethyl)morpholine hydrochloride 3658-48-8, Bis(2-ethylhexyl)phosphite 3658-77-3 3674-54-2, Tetrabutylammonium thiocyanate 3695-98-5, 1,1,3,3-Propanetetracarbonitrile 3709-18-0, 2,2,5-Trimethyl-1,3-dioxane-4,6-dione 3724-43-4, Chloromethylene dimethyl ammonium chloride 3731-59-7 3740-59-8 3747-74-8 3764-01-0, 2,4,6-Trichloropyrimidine 3766-55-0, 4-Allyl-3-thiosemicarbazide 3785-01-1, 2-[4-(Dimethylamino)styryl]-1-ethylpyridinium iodide 3859-39-0, 2-Acetyl-1,3-cyclopentanedione 3882-98-2 3934-20-1, 2,4-Dichloropyrimidine 3949-36-8, 3-Acetylcoumarin 3973-70-4, 1-Amino-4-(2-hydroxyethyl)piperazine 3977-29-5 4005-51-0, 2-Amino-1,3,4-thiadiazole 4009-98-7, (Methoxymethyl)triphenylphosphonium chloride 4024-14-0, 1-Methyl-2-tetralone 4056-73-9, 2-Acetyl-1,3-cyclohexanedione 4100-80-5, Methylsuccinic anhydride 4156-16-5 4166-53-4, 3-Methylglutaric anhydride 4199-89-7, 5-Chloro-1,10-phenanthroline 4207-56-1, Phenyltrimethylammonium tribromide 4254-29-9, 2-Indanol

4303-88-2, Hemicholinium-15 4316-42-1, 1-Butylimidazole 4317-06-0, Tetraethylphosphonium iodide 4317-07-1, Tetraethylphosphonium bromide 4319-49-7, 4-Aminomorpholine 4328-13-6, Tetrahexylammonium bromide 4363-93-3, 4-Quinolinecarboxaldehyde 4368-51-8, Tetraheptylammonium bromide 4385-35-7, 3-Isochromanone 4394-85-8, 4-Formylmorpholine 4407-40-3, 2,4-Bis(methylthio)-6-chloro-1,3,5-triazine 4421-08-3, 4-Hydroxy-3-methoxybenzonitrile 4421-09-4, 1,3-Benzodioxole-5-carbonitrile 4423-79-4, 1,4-Dioxaspiro[4.5]decan-2-one 4432-31-9, 4-Morpholine ethanesulfonic acid 4433-40-3, 5-(Hydroxymethyl)uracil 4437-20-1, Furfuryldisulfide 4439-02-5, 3,4-(Methylenedioxy)phenylacetonitrile 4441-17-2, Tripiperidinophosphine oxide 4468-59-1, 4-Hydroxy-3-methoxyphenylacetonitrile 4480-83-5, Diglycolic anhydride 4519-28-2, Tetramethylphosphonium bromide 4542-47-6, 4-Morpholinepropionitrile 4546-48-9, Methyl-2-phenyl-4-quinolinecarboxylate 4546-95-6, 1H-1,2,3-Triazole-4,5-dicarboxylic acid 4551-69-3, 4-Benzoyl-3-methyl-1-phenyl-2-pyrazolin-5-one 4559-70-0, Diphenylphosphine oxide 4568-71-2, 3-Benzyl-5-(2-hydroxyethyl)-4-methylthiazolium chloride 4593-16-2, 1-Acetyl-3-methylpiperidine 4595-59-9, 5-Bromopyrimidine 4606-65-9, 3-Piperidinemethanol 4663-98-3, 3,4-Pyridinedicarboxamide 4664-01-1, 1H-Pyrrolo[3,4-c]pyridine-1,3(2H)-dione 4664-08-8, Furo[3,4-c]pyridine-1,3-dione 4672-38-2, Propylphosphonic acid 4727-72-4, 1-Benzyl-4-hydroxypiperidine 4730-54-5, 1,4,7-Triazacyclononane 4746-97-8, 1,4-Cyclohexanedione monoethylene ketal 4762-26-9, Hexyl triphenylphosphonium bromide 4774-14-5, 2,6-Dichloropyrazine 4807-55-0, Methylrhodanine 4812-14-0, 3-Pyridyl hydroxymethanesulfonic acid 4814-74-8 4847-93-2 4897-50-1, 4-Piperidinopiperidine 4904-61-4, 1,5,9-Cyclododecatriene 4916-57-8, 1,2-Bis(4-pyridyl)ethane 4940-11-8 4965-17-7, Tetrapentyl ammonium chloride 4975-73-9 5019-82-9, Bicyclo[3.2.1]octan-2-one 5022-29-7 5034-06-0, Trimethylsulfoxonium chloride 5036-48-6, 1H-Imidazole-1-propanamine 5044-52-0, Vinyltriphenylphosphonium bromide 5049-61-6, Aminopyrazine 5086-74-8 5086-74-8, (2,3,5,6-Tetrahydro-6-phenylimidazo[2,1-.b]thiazole hydrochloride 5103-42-4 5108-96-3
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(transparentizing agent for electrophotog. migration imaging members)

IT 5137-55-3, Tricapryl methyl ammonium chloride 5142-22-3, 1-Methyladenine 5142-23-4, 3-Methyladenine 5154-02-9, 1,5-Isoquinolinediol 5157-08-4 5197-95-5, Benzyl triethyl ammonium bromide 5222-73-1, 3,4-Dimethoxy-3-cyclobutene-1,2-dione 5231-87-8 5240-72-2, 2-Norbornane methanol 5293-84-5, Chloromethyl triphenylphosphonium chloride 5327-10-6 5334-23-6 5348-51-6, 2-Hydroxy-4-methylpyrimidine hydrochloride 5350-41-4, Benzyl trimethyl ammonium bromide 5350-96-9, 4-Nitrobenzyl trimethyl ammonium chloride 5381-99-7 5394-18-3 5394-63-8 5395-04-0, Bis(pentamethylene)urea 5417-82-3, (1-Ethoxyethylidene)malononitrile 5418-11-1 5418-63-3 5418-95-1, 2-Guanidinobenzimidazole 5424-21-5, 2,4-Dichloro-6-methylpyrimidine 5425-44-5, 2-Phenyl-1,3-dithiane 5427-26-9, 5-Hydantoin acetic acid 5428-64-8, Pentaquine phosphate 5431-44-7, 2,6-Pyridine dicarboxaldehyde 5440-00-6 5452-83-5, 2-(2-Piperidinoethyl)pyridine 5453-80-5, 5-Norbornene-2-carboxaldehyde 5460-29-7 5464-79-9, 2-Amino-4-methoxybenzothiazole 5467-94-7 5518-52-5, Tri-2-furylphosphine 5521-55-1, 5-Methyl-2-pyrazinecarboxylic acid 5535-48-8, Phenylvinylsulfone 5538-94-3, Dioctyl dimethyl ammonium chloride 5579-84-0, 2-(2-Methylaminoethyl)Pyridine dihydrochloride 5585-96-6, 4-Indolyl acetate 5600-21-5, 2-Amino-4-chloro-6-methylpyrimidine 5614-64-2, 2-Amino-6,8-dihydroxypurine 5617-74-3,

3-Oxabicyclo[3.1.0]hexane-2,4-dione 5662-95-3, 3,3-Tetramethyleneglutaric anhydride 5732-44-5, 1,4-Butanediolcyclic sulfate 5807-14-7 5832-55-3 5922-92-9, Tetrahexylammonium chloride 5926-51-2, Bromomaleic anhydride 5932-53-6 5950-69-6, Hydrindantin dihydrate 5993-91-9 6018-41-3, Methylcoumalate 6020-54-8 6028-07-5, Harmalol hydrochloride 6035-45-6 6048-29-9, Phenacyl triphenylphosphonium bromide 6055-19-2, Cyclophosphamide monohydrate 6056-35-5 **6066-82-6** 6119-47-7 6126-22-3 6136-37-4, 1-Methylxanthine 6153-44-2, Methylorotate 6159-05-3, 1,1'-Diheptyl-4,4'-bipyridinium dibromide 6160-12-9, Sparteine sulfate pentahydrate 6164-78-9, 2,3-Pyrazinedicarboxamide 6209-44-5, 5-Nitrobarbituric acid trihydrate 6224-63-1, Tri-m-tolylphosphine 6228-25-7, 1,3-Dioxane-5,5-dimethanol 6228-47-3 6236-05-1, Nifuroxime 6238-13-7, 3-Quinuclidinol hydrochloride 6249-56-5, 3-Carboxypropyl trimethyl ammonium chloride 6266-23-5, 1-(Carboxymethyl)pyridinium chloride 6272-74-8 6281-14-7, 1,3,5-Tricyclohexylhexahydro-1,3,5-triazine 6302-94-9 6307-35-3, 2-Amino-5-bromo-6-methyl-4-pyrimidinol 6317-18-6, Methylene dithiocyanate 6318-55-4 6320-15-6, 6-Chloro-2,4-dimethoxypyrimidine 6351-10-6, 1-Indanol 6372-40-3, Isopropyldiphenyl phosphine 6425-32-7, 3-Morpholino-1,2-propanediol 6476-37-5, Dicyclohexylphenyl phosphine 6480-68-8, 3-Quinolinecarboxylic acid 6530-09-2, 3-Aminoquinuclidine dihydrochloride 6571-43-3, 2,3-Cyclododecenopyridine 6573-11-1, 1,4,7-Trithiacyclononane 6591-63-5, Quinidine sulfate dihydrate 6609-64-9, 2-Chloro-1,3,2-dioxaphospholane-2-oxide 6624-49-3, 3-Isoquinolinecarboxylic acid 6628-04-2, 4-Aminoquinaldine 6635-41-2, 2-Nitrobenzaldehyde oxime 6707-12-6, 5-Norbornene-2,2-dimethanol 6737-42-4, 1,3-Bis(diphenylphosphino)propane 6928-85-4, 1-Amino-4-methylpiperazine 6953-60-2 6959-47-3, 2-(Chloromethyl)pyridine hydrochloride 6959-66-6, 2-Mercapto-4-methylpyrimidine hydrochloride 6965-01-1 6967-12-0, 6-Aminoindazole 6968-75-8 6970-56-5 6994-25-8, 3-Amino-4-carbethoxypyrazole 7036-61-5, Propyl-1-(1-phenylethyl)imidazole-5-carboxylate hydrochloride 7065-23-8 7068-55-5 7083-71-8, Emetine dihydrochloride **hydrate** 7119-95-1, 1-Nitropyrazole 7144-05-0, 4-(Aminomethyl)piperidine 7145-99-5, 3,4-(Methylenedioxy)toluene 7164-43-4, 5-Aminoorotic acid 7173-51-5, BIO-DAC 7173-54-8, Tridodecylmethylammonium chloride 7182-08-3, 1-Morpholino-1-cycloheptene 7203-96-5 7205-98-3, Chloromethylphenylsulfone 7209-38-3, 1,4-Bis(3-aminopropyl)piperazine 7237-34-5, 2-Hydroxyethyl triphenylphosphonium bromide 7250-67-1, 1-(2-Chloroethyl)pyrrolidine hydrochloride 7259-44-1, Norharman hydrochloride 7281-04-1, Benzyldodecyldimethylammonium bromide 7325-46-4, 1,4-Benzenediacetic acid 7333-63-3, 4-Bromobutyl triphenylphosphonium bromide 7336-51-8, 2-Acetamido-4-methylthiazole 7364-25-2, 3-Indazolinone 7368-65-2, Tetraethylphosphonium chloride 7459-75-8, 3,6-Diaminoacridine hydrochloride 7519-74-6, Thiocamphor 7531-52-4 7569-26-8 7648-01-3, 3-Ethylrhodanine 7650-89-7, Tribenzylphosphine 7673-09-8, Trichloromelamine 7752-82-1, 2-Amino-5-bromopyrimidine 7757-83-7, Sodium sulfite 7779-27-3, 1,3,5-Triethylhexahydro-1,3,5-triazine 7797-83-3, 2,3-(Methylenedioxy)benzaldehyde 10212-25-6, Cyclocytidine hydrochloride 10247-90-2, Tetraheptylammonium chloride 10310-21-1, 2-Amino-6-chloropurine 10333-11-6 10342-85-5, 4'-Piperidinoacetophenone 10357-84-3, 2,6-Dihydroxypyridine hydrochloride 10361-16-7, BTC812 10444-89-0, 2-Amino-5-trifluoromethyl-1,3,4-thiadiazole 10450-69-8, Oleyl trimethyl ammonium chloride 10513-45-8 10534-59-5, Tetrabutylammonium acetate 10574-66-0, 3-Ethyl-2-thioxo-4-

oxazolidinone 10589-94-3, Dimethyl 3,7,12,17-tetramethyl-21oH,23oH-porphine-2,18-dipropionate 10591-31-8 13020-83-2, Purin-6-yltrimethylammonium chloride 13031-04-4 13078-30-3, 5-Anilino-1,2,3,4-thiatriazole 13149-00-3 13239-97-9 13327-27-0 13380-94-4 13395-71-6 13414-95-4 13492-21-2 13575-75-2, 6,7-Dimethoxy-1-tetralone 13618-91-2, 4,5,6,7-Tetrahydroindole 13621-25-5, 5,7-Dimethyl-1-tetralone 13621-47-1 13678-67-6 13678-68-7 13744-68-8 13750-62-4, 1-Benzyl-2-methylimidazole 13754-19-3, 4,5-Diaminopyrimidine 13808-64-5, 4-Bromo-3-methylpyrazole 13889-98-0, 1-Acetylpiperazine 13957-31-8, 4-Thiouridine 14068-53-2 14098-24-9, Benzo-18-crown-6 14098-44-3, Benzo-15-crown-5 14099-81-1, 1,2,3,4-Tetrahydroisoquinoline hydrochloride 14114-05-7, Cyclopropyl triphenylphosphonium bromide 14134-79-3, 3,3'-Dimethyloxacarbocyanine iodide 14161-11-6, 3,4,5-Trichloropyridazine 14173-30-9, 3-Hydroxy-2-(hydroxymethyl)pyridine hydrochloride 14174-08-4, Benzo-12-crown-4 14174-09-5, Dibenzo-24-crown-8 14187-32-7, Dibenzo-18-crown-6 14268-66-7, 3,4-(Methylenedioxy)aniline 14337-43-0, Ethylchlorooximido acetate 14338-32-0, 2-Chloro-1-methylpyridinium iodide 14492-68-3, Emcol E-607S 14667-55-1, 2,3,5-Trimethylpyrazine 14668-38-3 14678-02-5, 5-Amino-3-methylisoxazole 14866-33-2, Tetraoctylammonium bromide 14866-34-3, Tetradodecyl ammonium bromide 14866-42-3, Stearyltributylphosphonium bromide 14901-16-7 14937-42-9, Tetrakisdecylammonium bromide 14937-45-2, Hexadecyltributylphosphonium bromide 15328-32-2, 1H-Benzotriazole-1-carbonitrile 15341-08-9 15439-16-4, 1,4,8,12-Tetraazacyclopentadecane 15454-54-3, 5-Aminotetrazole monohydrate 15471-17-7 15733-83-2, 4-Methoxy-2-quinolinecarboxylic acid 15788-16-6, 5-Benzimidazolecarboxylic acid 15804-19-0, 2,3-Dihydroxyquinoxaline 15988-11-1, 4-Phenylurazole 16056-11-4, Phenyl trimethyl ammonium bromide 16069-36-6 16096-32-5, 4-Methylindole 16135-41-4, 6,7-Dimethoxy-3-isochromanone 16179-97-8, 2-Pyridylacetic acid hydrochloride 16311-69-6, 3,4-Dimethyl-5-(2-hydroxyethyl)thiazolium iodide 16489-90-0, 6-Ethoxy-1,2,3,4-tetrahydro-2,2,4-trimethylquinoline 16617-46-2, 3-Amino-4-pyrazolecarbonitrile 16691-43-3 16731-68-3, 2-Undecylimidazole 16834-13-2 16841-14-8, INCROQUAT BEHENYL BDQ/P 16849-88-0 16898-52-5, 4,4'-Trimethylenedipiperidine 17216-08-9, 2-Acetyl-1-tetralone 17252-51-6 17301-53-0, Behenyl trimethyl ammonium chloride 17347-61-4, 2,2-Dimethylsuccinic anhydride 17354-79-9 17441-67-7, Bicyclo[2.2.2]oct-5-ene-2,3-dimethanol 17455-13-9, 1,4,7,10,13,16-Hexaoxacyclooctadecane 17455-23-1 17455-25-3, Dibenzo-30-crown-10 17577-28-5, (Ethoxycarbonylmethyl)triphenylphosphonium chloride 17692-39-6, Fomocaine 17760-91-7 17872-92-3 18042-62-1 18073-84-2
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(transparentizing agent for electrophotog. migration imaging members)

IT **2491-17-0 6066-82-6**
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(transparentizing agent for electrophotog. migration imaging members)

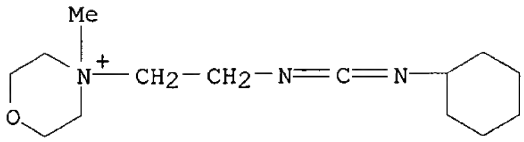
RN 2491-17-0 HCAPLUS

CN Morpholinium, 4-[2-[(cyclohexylcarbonimidoyl)amino]ethyl]-4-methyl-, salt with 4-methylbenzenesulfonic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

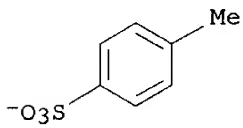
CRN 20702-21-0

CMF C14 H26 N3 O

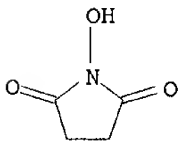


CM 2

CRN 16722-51-3
CMF C7 H7 O3 S



RN 6066-82-6 HCAPLUS
CN 2,5-Pyrrolidinedione, 1-hydroxy- (9CI) (CA INDEX NAME)



L21 ANSWER 16 OF 21 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1995:921925 HCAPLUS
DOCUMENT NUMBER: 123:334349
TITLE: Phenylboronic acid complexes
INVENTOR(S): Stolowitz, Mark L.
PATENT ASSIGNEE(S): Prolinx, Inc., USA
SOURCE: PCT Int. Appl., 65 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 10
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9520591	A1	19950803	WO 1995-US1004	19950127

W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, JP, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MX, NL, NO, NZ, PL, PT, RO, RU, SE, SI, SK, TJ, TT, UA, UZ, VN
RW: KE, MW, SD, SZ, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN,

TD, TG

US 5594151	A	19970114	US 1994-188531	19940128
US 5594111	A	19970114	US 1994-188958	19940128
US 5623055	A	19970422	US 1994-189176	19940128
CA 2181252	AA	19950803	CA 1995-2181252	19950127
AU 9517324	A1	19950815	AU 1995-17324	19950127
AU 702017	B2	19990211		
EP 741734	A1	19961113	EP 1995-909329	19950127
EP 741734	B1	20010404		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
JP 09508389	T2	19970826	JP 1995-520146	19950127
AT 200292	E	20010415	AT 1995-909329	19950127
ES 2158085	T3	20010901	ES 1995-909329	19950127
RU 2202555	C2	20030420	RU 1996-117248	19950127
US 5677431	A	19971014	US 1995-482886	19950607
US 5852178	A	19981222	US 1995-577068	19951222
US 6008406	A	19991228	US 1997-805451	19970225

PRIORITY APPLN. INFO.:

US 1994-188460	A	19940128
US 1994-188531	A	19940128
US 1994-188958	A	19940128
US 1994-189176	A	19940128
WO 1995-US1004	W	19950127
US 1995-488193	B1	19950607

OTHER SOURCE(S): MARPAT 123:334349

AB The invention provides novel bioconjugate complexes linking two bioactive species (which may be the same or different) wherein the linkage comprises at least one boron atom, e.g., at least one phenylboronic acid complex. The bioconjugate complex of the invention is preferably a compd. of the general formula BAS-L-Bc-L'-(Bc'-L'')n-BAS', wherein BAS and BAS' are bioactive species (which may be the same of different); L, L', and L'' are linkers (which may be the same or different); Bc and Bc' are phenylboronic acid complexes (which may be the same or different) of formula D-E or E-D wherein D is a phenylboronic acid moiety and E is a phenylboronic acid complexing moiety, and n is 0 or 1. Also provided are reagents and semiconjugates for making the bioconjugate complexes of the invention and kits and methods utilizing the bioconjugate complexes of the invention.

IC ICM C07F005-02
ICS G01N033-53; G01N033-72

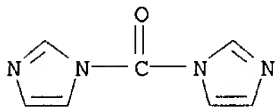
CC 9-14 (Biochemical Methods)
Section cross-reference(s): 6, 29

IT 51-85-4 56-12-2, 4-Aminobutanoic acid, reactions 60-24-2, 2-Mercaptoethanol 60-32-2, 6-Aminohexanoic acid 64-17-5, Ethanol, reactions 65-49-6, 4-Aminosalicylic acid 67-56-1, Methanol, reactions 69-72-7, reactions 74-89-5, Methylamine, reactions 79-04-9, Chloroacetyl chloride 79-22-1, Methyl chloroformate 89-57-6, 5-Aminosalicylic acid 90-02-8, reactions 108-30-5, Succinic anhydride, reactions 108-31-6, 2,5-Furandione, reactions 110-60-1, 1,4-Butanediamine 111-50-2, Adipoyl chloride 118-93-4 119-80-2, Dithiosalicylic acid 124-09-4, 1,6-Hexanediamine, reactions 524-38-9, N-Hydroxyphthalimide **530-62-1**, 1,1'-Carbonyldiimidazole **538-75-0**, Dicyclohexylcarbodiimide 541-59-3, 1H-Pyrrole-2,5-dione 543-20-4, Succinyl chloride 593-56-6, Methoxylamine hydrochloride 832-53-1, Pentafluorobenzenesulfonyl chloride 1002-18-2 1074-82-4, Potassium phthalimide 1490-25-1, 3-Carbomethoxypropionyl chloride 1648-99-3, 2,2,2-Trifluoroethanesulfonyl chloride **1892-57-5**, 1-Ethyl-3-3-dimethylaminopropylcarbodiimide 2127-03-9, 2,2'-Dithiodipyridine

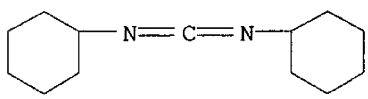
2637-34-5, 2-Thiopyridone 2645-22-9, 4,4'-Dithiodipyridine 3483-12-3, Dithiothreitol 4282-19-3 4349-62-6, 2-Benzyloxybenzoyl chloride 5197-62-6, 2-2-2-Chloroethoxyethoxyethanol 5538-51-2, 2-Acetoxybenzoyl chloride **6066-82-6**, N-Hydroxysuccinimide 6539-14-6, 2-Iminothiolane 7664-41-7, Ammonia, reactions 7803-49-8, Hydroxylamine, reactions 7803-57-8, Hydrazine **hydrate** 10027-07-3, Suberoyl chloride 10387-40-3, Potassium thioacetate 13094-51-4, Bromoacetic anhydride 13887-98-4 14047-29-1, 4-Carboxyphenylboronic acid 14273-90-6, Methyl 6-bromohexanoate 15486-96-1, 3-Bromopropionyl chloride 19829-29-9, 4-Thiopyridone 22118-09-8, Bromoacetyl chloride 26555-40-8, Methoxycarbonylsulfenyl chloride 26763-71-3, Toluenesulfonyl chloride 28088-64-4, Aminosalicylic acid 30418-59-8, 3-Aminophenylboronic acid 31255-25-1 36839-55-1, 1,2-Bis-2-iodoethoxyethane 38020-81-4, Iodoacetyl chloride 38240-29-8, 3-Nitro-2-mercaptopyridine 41518-22-3, 3-Iodopropionyl chloride 51857-17-1 54907-61-8, Iodoacetic anhydride 68076-36-8 68181-17-9 76931-93-6 78887-30-6 87199-19-7, 3-Iodoacetamidophenylboronic acid 89992-70-1, 2-Cyanoethyl-N,N-diisopropylchlorophosphoramidite 133887-74-8 136537-21-8 170368-31-7 170368-32-8 170368-43-1 170516-53-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(phenylboronic acid complexes prepn. for conjugation of biol. macromols. and biopolymers)

IT **530-62-1**, 1,1'-Carbonyldiimidazole **538-75-0**, Dicyclohexylcarbodiimide **1892-57-5**, 1-Ethyl-3-3-dimethylaminopropylcarbodiimide **6066-82-6**, N-Hydroxysuccinimide
RL: RCT (Reactant); RACT (Reactant or reagent)
(phenylboronic acid complexes prepn. for conjugation of biol. macromols. and biopolymers)

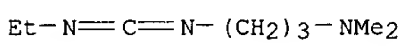
RN 530-62-1 HCAPLUS
CN 1H-Imidazole, 1,1'-carbonylbis- (9CI) (CA INDEX NAME)



RN 538-75-0 HCAPLUS
CN Cyclohexanamine, N,N'-methanetetraylbis- (9CI) (CA INDEX NAME)

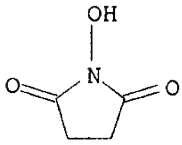


RN 1892-57-5 HCAPLUS
CN 1,3-Propanediamine, N'-(ethylcarbonimidoyl)-N,N-dimethyl- (9CI) (CA INDEX NAME)



RN 6066-82-6 HCAPLUS

CN 2,5-Pyrrolidinedione, 1-hydroxy- (9CI) (CA INDEX NAME)



L21 ANSWER 17 OF 21 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1995:553799 HCAPLUS
DOCUMENT NUMBER: 123:131326
TITLE: Specific immobilization of electropolymerized polypyrrole thin films onto interdigitated microsensor electrode arrays
AUTHOR(S): Guiseppi-Elie, A.; Wilson, A. M.; Tour, J. M.; Brockmann, T. W.; Zhang, P.; Allara, D. L.
CORPORATE SOURCE: Research and Development Department, AAI-ABTECH, Yardley, AR, 19067, USA
SOURCE: Langmuir (1995), 11(5), 1768-76
CODEN: LANGD5; ISSN: 0743-7463
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Electroactive polypyrrole (PPy) thin films were grown by potentiostatic electropolymn. at chem. derivatized interdigitated microsensor electrodes (IMEs) of gold on borosilicate glass leading to specific adhesion of the electroconductive polymer film to the device. Films were grown to a const. electropolymn. charge d. of 70 mC/cm2 at 0.65 V vs. Ag0/AgCl, 3 M Cl- from 1.0M aq. pyrrole solns. contg. 2.5 mM poly(styrenesulfonic acid) (PSSA) and 2.5 mM dodecylbenzynesulfonate with the pH adjusted to 3.0 and the temp. maintained at 20.degree.. The interdigit space of the IME devices was chem. derivatized by chem. modification with (3-aminopropyl)trimethoxysilane followed by direct linking of the primary amine to the carboxylic acid of 3-(1-pyrrolyl)propionic acid using the heterobifunctional linker 1,3-diisopropylcarbodiimide enhanced with N-hydroxysulfosuccinimide in aq. soln. XPS evidence supports the immobilization of .omega.-(1-pyrrolyl) moieties to the device surface. The 3-(1-pyrrolyl)propionic acid is electroactive, electropolymerizable, and coelectropolymerizable with pyrrole monomer from aq. soln. Electroconductive PPy films grown on these .omega.-(1-pyrrolyl) derivatized IME devices were allowed to bridge the interdigit space and so pyrrole monomer was coelectropolymd. with .omega.-(1-pyrrolyl) moieties specifically attached to the interdigit space of the device. This leads to specific adhesion of the PPy thin film to the device surface. Films grown in this way were compared to films similarly grown on unmodified devices, on IME devices rendered hydrophobic by chem. modification with dodecyltrichlorosilane, and on devices modified with (3-aminopropyl)trimethoxysilane. Cyclic voltammetry revealed no significant difference in the electroactivity of PPy films grown on these various IME surfaces. Films were also characterized by the time to adhesive failure using the Scotch tape test following immersion in PBKCl 7.2 buffer or after being maintained **dry** under vacuum and over desiccating mol. sieves. The time to adhesive failure in both test environments occurred in the order unmodified < dodecyltrichlorosilane modified .mchlt.

(3-aminopropyl)trimethoxysilane modified .mchlt. .omega.-(1-pyrrolyl) derivatized. The failure times were 3 days < 5 days .mchlt. 27 days .mchlt. 235+ days for films immersed in aq. buffer and were 3 days < 36+ days .mchlt. 235+ days .mchlt. 235+ days for films stored **dry** under vacuum. The electrochem. and adhesion test evidence suggest that the PPy films are specifically immobilized to the .omega.-(1-pyrrolyl) derivatized IME devices and that this negates the hydrolytic instability of the PPy/glass interface that leads to poor adhesion under physiol. conditions.

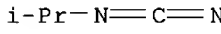
CC 79-2 (Inorganic Analytical Chemistry)

IT **693-13-0**, 1,3-Diisopropylcarbodiimide 4484-72-4, Dodecyltrichlorosilane 13822-56-5, (3-Aminopropyl)trimethoxysilane 32857-62-8, (.alpha.,.alpha.,.alpha.-Trifluoro-p-tolyl)acetic acid **82436-78-0**, N-Hydroxysulfosuccinimide
RL: NUU (Other use, unclassified); USES (Uses)
(in specific immobilization of electropolymd. polypyrrole thin films onto interdigitated microsensor electrode arrays)

IT **693-13-0**, 1,3-Diisopropylcarbodiimide **82436-78-0**, N-Hydroxysulfosuccinimide
RL: NUU (Other use, unclassified); USES (Uses)
(in specific immobilization of electropolymd. polypyrrole thin films onto interdigitated microsensor electrode arrays)

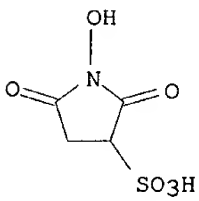
RN 693-13-0 HCAPLUS

CN 2-Propanamine, N,N'-methanetetraylbis- (9CI) (CA INDEX NAME)



RN 82436-78-0 HCAPLUS

CN 3-Pyrrolidinesulfonic acid, 1-hydroxy-2,5-dioxo- (9CI) (CA INDEX NAME)



L21 ANSWER 18 OF 21 HCAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1993:87614 HCAPLUS

DOCUMENT NUMBER: 118:87614

TITLE: Water-insoluble derivatives of polyanionic polysaccharides as surgical adhesion inhibitors and matrixes for sustained-release drugs

INVENTOR(S): Miller, Robert; Burns, James W.; Xu, Xuejian

PATENT ASSIGNEE(S): Genzyme Corp., USA

SOURCE: PCT Int. Appl., 46 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 5

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9220349	A1	19921126	WO 1992-US4212	19920519
W: AU, CA, FI, JP, NO				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE				
US 6174999	B1	20010116	US 1992-833973	19920211
AU 9221434	A1	19921230	AU 1992-21434	19920519
AU 670030	B2	19960704		
EP 587715	A1	19940323	EP 1992-912424	19920519
EP 587715	B1	20020925		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL, SE				
JP 06508169	T2	19940914	JP 1992-500263	19920519
AT 224916	E	20021015	AT 1992-912424	19920519
JP 3425147	B2	20030707	JP 1993-500263	19920519

PRIORITY APPLN. INFO.: US 1991-703254 A 19910520
US 1992-833973 A 19920211
US 1987-100104 A2 19870918
US 1990-543163 A2 19900625
WO 1992-US4212 A 19920519

AB Polyanionic polysaccharides, such as CMC, hyaluronic acid, heparin, chondroitin-6-sulfate and dermatan sulfate, are rendered water-insol. by treatment with a nucleophile, an activating agent and, optionally, a modifying agent. The nucleophile is an amino acid or a salt, amide or ester thereof, an amino alc., aminothiol, peptide, protein, etc. The activating agent is 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide-HCl (EDC), a phosphonium hexafluorophosphate, etc. The modifying agent is 1-hydroxybenzotriazole-H2O, N-hydroxysulfosuccinimide, 4-nitrophenol, etc. The products are films, gels or foams, which retain their strength even when **hydrated**. They are useful for preventing postoperative membrane adhesion or as matrixes for sustained-release drugs. A Na hyaluronate hydrogel was prepd., using EDC as activating agent and leucine Me ester-HCl as nucleophile.

IC ICM A61K031-725
ICS A61K031-715; A61K031-70; C07H001-00

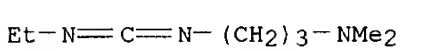
CC 63-5 (Pharmaceuticals)

IT 62-53-3D, Aniline, reaction products with polyanionic polysaccharides 63-84-3D, reaction products with polyanionic polysaccharides 71-00-1D, Histidine, reaction products with polyanionic polysaccharides 87-86-5D, Pentachlorophenol, reaction products with polyanionic polysaccharides 88-75-5D, 2-Nitrophenol, reaction products with polyanionic polysaccharides 100-02-7D, 4-Nitrophenol, reaction products with polyanionic polysaccharides 109-55-7D, 3-Dimethylaminopropylamine, reaction products with polyanionic polysaccharides 156-87-6D, 3-Amino-1-propanol, reaction products with polyanionic polysaccharides 288-32-4D, Imidazole, reaction products with polyanionic polysaccharides 616-34-2D, Glycine methyl ester, reaction products with polyanionic polysaccharides 771-61-9D, Pentafluorophenol, reaction products with polyanionic polysaccharides 1122-58-3D, 4-Dimethylaminopyridine, reaction products with polyanionic polysaccharides 1849-36-1D, 4-Nitrothiophenol, reaction products with polyanionic polysaccharides **1892-57-5D**, reaction products with polyanionic polysaccharides 2133-40-6D, L-Proline methyl ester hydrochloride, reaction products with polyanionic polysaccharides 2743-40-0D, L-Leucine ethyl ester hydrochloride, reaction products with polyanionic polysaccharides 2748-02-9D, L-Leucine tert-butyl ester hydrochloride, reaction products with polyanionic polysaccharides 4875-10-9D, 2-Nitrothiophenol, reaction

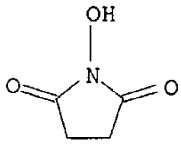
products with polyanionic polysaccharides **6066-82-6D**, N-Hydroxysuccinimide, reaction products with polyanionic polysaccharides 6306-52-1D, L-Valine methyl ester hydrochloride, reaction products with polyanionic polysaccharides 7084-11-9D, reaction products with polyanionic polysaccharides 7517-19-3D, Leucine methyl ester hydrochloride, reaction products with polyanionic polysaccharides 7524-50-7D, L-Phenylalanine methyl ester hydrochloride, reaction products with polyanionic polysaccharides 9004-32-4D, Carboxymethyl cellulose, derivs. 9004-61-9D, Hyaluronic acid, derivs. 9005-49-6D, Heparin, derivs. 9005-49-6D, Heparin, reaction products 9067-32-7D, Sodium hyaluronate, derivs. 12768-31-9D, Carboxymethylamylose, derivs. 13079-20-4D, Leucinamide, reaction products with polyanionic polysaccharides 18598-74-8D, L-Isoleucine methyl ester hydrochloride, reaction products with polyanionic polysaccharides 22888-59-1D, L-Arginine methyl ester hydrochloride, reaction products with polyanionic polysaccharides 22888-60-4D, L-Histidine methyl ester hydrochloride, reaction products with polyanionic polysaccharides 24967-94-0D, derivs. 25322-46-7D, Chondroitin-6-sulfate, derivs. 27988-97-2D, Tetrazole, reaction products with polyanionic polysaccharides 50296-37-2D, reaction products with polyanionic polysaccharides 56602-33-6D, reaction products with polyanionic polysaccharides **82436-78-0D**, N-Hydroxysulfosuccinimide, reaction products with polyanionic polysaccharides 94790-37-1D, reaction products with polyanionic polysaccharides 123333-53-9D, reaction products with polyanionic polysaccharides 132705-51-2D, reaction products with polyanionic polysaccharides 138551-31-2D, reaction products with polyanionic polysaccharides
RL: BIOL (Biological study)
(insol. biocompatible films and foams and gels, for surgery and drug formulations)

IT **1892-57-5D**, reaction products with polyanionic polysaccharides **6066-82-6D**, N-Hydroxysuccinimide, reaction products with polyanionic polysaccharides **82436-78-0D**, N-Hydroxysulfosuccinimide, reaction products with polyanionic polysaccharides
RL: BIOL (Biological study)
(insol. biocompatible films and foams and gels, for surgery and drug formulations)

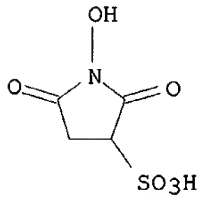
RN 1892-57-5 HCAPLUS
CN 1,3-Propanediamine, N'-(ethylcarbonimidoyl)-N,N-dimethyl- (9CI) (CA INDEX NAME)



RN 6066-82-6 HCAPLUS
CN 2,5-Pyrrolidinedione, 1-hydroxy- (9CI) (CA INDEX NAME)



RN 82436-78-0 HCAPLUS
CN 3-Pyrrolidinesulfonic acid, 1-hydroxy-2,5-dioxo- (9CI) (CA INDEX NAME)



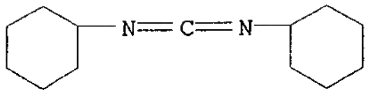
L21 ANSWER 19 OF 21 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1989:73857 HCAPLUS
DOCUMENT NUMBER: 110:73857
TITLE: Magnetized physiological substances and their preparation
INVENTOR(S): Inada, Yuji; Tamaura, Yutaka; Takahashi, Katsunobu
PATENT ASSIGNEE(S): Bihama, Hisaharu, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63091081	A2	19880421	JP 1986-235986	19861003

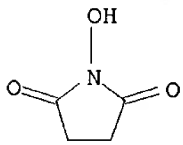
PRIORITY APPLN. INFO.: JP 1986-235986 19861003

AB Physiol. substances are modified with a lipophilic mol. through which magnetic substances are further bound to form a complex. The resulting conjugates can be recovered from bioreactors, without sacrificing their activities, using a magnetic field. 1,10-Decanedicarboxylic acid 4.6 and N-hydroxysuccinic acid imide 2.3 g disolved in dioxane 80 mL was mixed with dicyclohexylcarboxyimide. This soln. was used to modify Pseudomonas fluorescens lipase. Modified lipase 93 mg was reacted with a 0.1-mL soln. contg. FeCl3 13 and FeCl2 30 mg, and freeze-**dried** to obtain the magnetized lipase complex. The complex, which contained the magnetic substance 30 and protein 55%, was stably dispersed in an org. solvent such as benzene (the activity for synthesizing lauryl laurate in benzene was 15 .mu. mol/h/mg protein) and was easily recovered from the reaction mixt. using a magnetic field of 2000 Oe.

IC ICM C12N011-00
CC 16-1 (Fermentation and Bioindustrial Chemistry)
Section cross-reference(s): 7
IT **538-75-0** 693-23-2, Dodecanedioic acid **6066-82-6**
RL: BIOL (Biological study)
(lipase modified with, reaction of magnetic substances with)
IT **538-75-0 6066-82-6**
RL: BIOL (Biological study)
(lipase modified with, reaction of magnetic substances with)
RN 538-75-0 HCAPLUS
CN Cyclohexanamine, N,N'-methanetetraylbis- (9CI) (CA INDEX NAME)



RN 6066-82-6 HCAPLUS
CN 2,5-Pyrrolidinedione, 1-hydroxy- (9CI) (CA INDEX NAME)

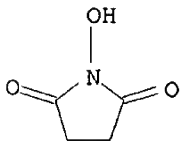


L21 ANSWER 20 OF 21 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1979:50068 HCAPLUS
DOCUMENT NUMBER: 90:50068
TITLE: A photoaffinity labeling study of the messenger RNA-binding region of Escherichia coli ribosomes
AUTHOR(S): Towbin, Harry; Elson, David
CORPORATE SOURCE: Biochem. Dep., Weizmann Inst. Sci., Rehovot, Israel
SOURCE: Nucleic Acids Research (1978), 5(9), 3389-407
CODEN: NARHAD; ISSN: 0305-1048
DOCUMENT TYPE: Journal
LANGUAGE: English

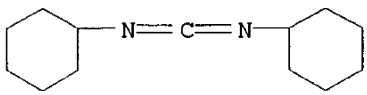
AB A photoaffinity labeling study of the mRNA-binding region of E. coli ribosomes was made, using oligoadenylic acids as mRNA analogs. The oligonucleotides, of chain length 6-8, carried a radioactive photolabile arom. azide reagent bound covalently to the 3'-terminal ribose moiety. The synthesis of the reagent, p-azidobenzoyl glycylhydrazide-2-3H2, is described. The derivatized oligonucleotides were functional messengers. They stimulated the binding of the cognate aminoacyl-tRNA, lysyl-tRNA; their binding was reciprocally stimulated by lysyl-tRNA; and they competed with underivatized oligoadenylates for ribosomal binding sites. When the 70 S ribosomal binding complex was irradiated, the photolabile reagent reacted covalently with both RNA and proteins of the 30 S subunit and with tRNA, but not with the 50 S subunit. The 16 S rRNA appeared to be labeled at >1 site. Of the proteins, S3 and S5 reacted with the reagent with high specificity; S4 may have been labeled to a minor degree. The results indicate that S3 and S5 not only affect the decoding process as has been previously reported, but are also located in the mRNA-binding region of the ribosome, presumably to the 3'-side of the decoding site.

CC 6-13 (General Biochemistry)
IT 68922-88-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of and reaction with hydrazine **hydrate**)
IT **6066-82-6**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with azidobenzoic acid and dicyclohexylcarbodiimide)
IT **538-75-0**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with hydroxysuccinimide and azidobenzoic acid)

IT **6066-82-6**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with azidobenzoic acid and dicyclohexylcarbodiimide)
RN 6066-82-6 HCAPLUS
CN 2,5-Pyrrolidinedione, 1-hydroxy- (9CI) (CA INDEX NAME)



IT **538-75-0**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with hydroxysuccinimide and azidobenzoic acid)
RN 538-75-0 HCAPLUS
CN Cyclohexanamine, N,N'-methanetetraylbis- (9CI) (CA INDEX NAME)



L21 ANSWER 21 OF 21 HCAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1966:438784 HCAPLUS
DOCUMENT NUMBER: 65:38784
ORIGINAL REFERENCE NO.: 65:7267e-h,7268a-h,7269a-b
TITLE: Synthesis of peptides with N-acyl-dipeptide 1-hydroxypiperidine esters
AUTHOR(S): Weygand, Friedrich; Koenig, Wolfgang; Nintz, Eckhardt; Hoffmann, Dieter; Huber, Peter; Khan, Nur Muhammad; Prinz, Wolfgang
CORPORATE SOURCE: Tech. Hochsch., Munich, Germany
SOURCE: Zeitschrift fuer Naturforschung, Teil B: Anorganische Chemie, Organische Chemie, Biochemie, Biophysik, Biologie (1966), 21(4), 325-31
CODEN: ZENBAX; ISSN: 0044-3174
DOCUMENT TYPE: Journal
LANGUAGE: German

AB A series of amino acid 1-hydroxypiperidine ester HCl salts (I) was prepd. from the appropriate amino acid N-carboxylic acid anhydride (Leuchs anhydride) (II) with 1-hydroxypiperidine-HCl (III) in CHCl3 and converted by various methods to the corresponding N-acyldipeptide 1-hydroxypiperidine esters (IV). The subsequent reaction of the IV with amino acid Me ester HCl salt in the presence of AcONa yielded the corresponding N-acyltripeptide Me esters (V). The advantage of this method is the avoidance of free dipeptide esters and the racemization-free synthesis of the V. The appropriate II (0.010 mole) in 20 cc. CHCl3 treated at room temp. with 0.01 mole III in 20 cc. CHCl3 and refrigerated several hrs. deposited the corresponding I which decomp. from 130.degree. with yellowing and blackening above 200.degree.. In this manner were prepd. the following I (amino acid of I, % yield, [.alpha.]20546, and c in MeOH given): L-alanine, 66, --,--; L-valine, 83.5, 11.6.degree., 1;

L-leucine, 77, 5.9.degree., 0.8; L-isoleucine, 70.5, 18.9.degree., 0.6; L-methionine, 36, 14.5.degree., 1.2; L-phenylalanine, 86, 7.3.degree., 0.5. In the prepn. of the I of L-alanine, the solid II was added with stirring to the III in CHCl3; in the prepn. of the I ofL-methionine, the mixt. was heated at 40-50.degree.. The appropriate I and N-acylamino acid (VI) (0.01 mole each) in 50 cc. **dry** tetrahydrofuran treated at -15.degree. with dicyclohexylcarbodiimide and 1 g. Et3N in a little tetrahydrofuran, stirred 10 min., warmed to room temp., filtered, and evapd. gave the corresponding IV; method A. The appropriate VI (0.005 mole) and 0.5 g. Et3N in 30 cc. **dry** tetrahydrofuran treated dropwise at -15.degree. with 0.54 g. ClCO2Et in a little tetrahydrofuran and after 10 min. with 0.005 mole appropriate I and during 10 min. with 0.5 g. Et3N, warmed to room temp., and kept overnight yielded the corresponding IV; method B. The appropriate VI (0.02 mole) and 2 g. MeCN in 50 cc. MeCN added at 0.degree. to 5.1 g. Woodward reagent K in 40 cc. MeCN, stirred 2 hrs. at 0.degree., treated with 0.02 mole appropriate I and 2 g. Et3N, and stirred overnight without cooling yielded the corresponding IV; method C. 1-Hydroxypiperidine ester of, Method, % yield, m.p., [.alpha.]20546, c in MeOH; Z-Val-Ala, A, 59, 130.degree., -72.2.degree., 1.7; Z-Met-Ala, A, 51, 97.degree., -41.degree., 1; Z-Phe-Ala, A, 9, 99-101.degree., -29.5.degree., 1; p-MeOC6H4CH2O2C-Try-Ala, C, 70, 118.5-20.degree., -9.9.degree., 1; Z-Ala-Val, C, 72, 88-90.degree., -75.2.degree., 1; CF3CO-Gly-Val, A, 85, 111-12.degree., -62.degree., 1; Z-Pro-Val, C, 78 (68), 111-13.degree., -94.5.degree., 1; Z-Met-Val, C, 61, 80-1.degree., -27.5.degree., 1; Phe-Val, C, 77 (21), 110-11.degree., -32.0.degree., 1; Z-Ser-Val, C, 50, oil, -36.degree., 1; Z-Gly-Leu, B, 61, 88-91.degree., -15.6.degree., 0.5; Z-Val-Leu, B, 47, 104-5.degree., -32.5.degree., 1; Z-Phe-Leu, A, 68, 99-102.degree., -57.5.degree., 1; Z-Ala-Ile, A, 90, --, --, --; Z-Val-Ile, B, 79, 88-9.degree., -43.degree., 1; Z-Pro-Ile, A (B), 79, oil, --, --; Z-Phe-Ile, B, 74, 95-6.degree., -27.4.degree., 0.9; Z-Ala-Met, C, 82, 155-8.degree., -41.degree., 1; Z-Phe-Met, B (C), 53 (77), 124-6.degree., -31.degree., --1.5; Z-Ala-Phe, C (B), 77 (44), 96-7.degree., -43.1.degree., 1; Z-Leu-Phe, B (C), 59 (86), 89-91.degree., -12.8.degree., 0.5; Z-Met-Phe, C, 71, 95-7.degree., -31.4.degree., 1; , A, 56, 93-5.degree., --, --; , B, 45, 95-7.degree., --, --; , D, 82, 94-6.degree., --, --; , D, 86, 95-7.degree., --, --; Z-Phe-Phe, C, 75, 132-3.degree., -24.4.degree., 1; , A, 58, 131-2.degree., --, --; , B, 47, 132-3.degree., --, --; Z-Ser-Phe, C, 78, 138-9.5.degree., -30.2.degree., 1; Z-Glu(.gamma.-NH2)-Phe, C, 78, 145-7.degree., -32.1.degree., 1; p-MeOC6H4CH2O2C-Try-Phe, C, 84, 75-6.degree., -6.9.degree., 1 V, mole ratio of IV to amino acid ester, reaction temp. (hrs.), at 20.degree., at 40.degree., % yield, m.p., [.alpha.]20546, c in MeOH; p-MeOC6H4CH2O2C-Try-A la-Ala-OMe, 1:2, --, 48, 67, 170-1.degree., -8.5, 0.6 (EtOH); p-MeOC6H4CH2O2C-Try-A la-Ala-OMe, 1:2, --, 48, 51, 165-8.degree., -27.0, 0.7 (EtOH); Z-Ala-Val-Ala-OMe, 1:1.3, 68, 22, 51, 210.degree., (-68.degree.), 1; Z-Ala-Val-Phe-OMe, 1:1.3, 68, 24, 46, 199-200.degree.,(-44.degree.), 0.5 (AcOH); Z-Pro-Val-Ala-OMe, 1:1.3, 68, 27, 59, 149-52.degree., (-108.5.degree.), 1; Z-Pro-Val-Phe-OMe, 1:1.3, 68, 29, 54.5, 186.degree., (-86.degree.), 0.5; Z-Phe-Val-(CF3CO) Lys-OMe, 1:1.3, 73, 48, 60, 143.degree., -27.4.degree., 0.5; Z-Ser-Val-Ala-OMe, 1:1.3, 50, 68, 35, 194.5-96.degree., -57.2.degree., 0.7 (AcOH); Z-Gly-Leu-Met-OMe, 1:2, 17, --, 84.5, 117-18.degree., -12.5.degree., 0.6 (AcOEt); Z-Val-Leu-Phe-OMe, 1:2, 72, --, 51, 175-7.degree., -29.9.degree., 0.7; Z-Phe-Leu-Gly-OMe, 1:2, 24, 24, 83, 166-7.degree., -24.1.degree., 0.8; Z-Phe-Leu-Val-OMe, 1:2, 96, --, 81, 133-5.degree., -44.7.degree., 0.8; Z-Phe-Leu-Thr-OMe, 1:2, 72, --, 71, 148-50.degree.,

-30.7.degree., 0.9; Z-Ala-Ile-Gly-OMe, 1:2, 72, --, 48, 189-92.degree., -59.degree., 1; Z-Val-Ile-Ala-OMe, 1:2, 72, --, 41, 196.degree., -72.3.degree., 0.6; Z-Pro-Ile-Gly-OMe, 1:2, 24, --, 73, 137-8.degree., (-92.degree.), 1; Z-Pro-Ile-Gly-OMe, 1:2, 48, --, 40, 152.degree., (-85.5.degree.), 2; Z-Phe-Ile-Gly-OMe, 1:2, 48, --, 100, 185.degree., -18.7.degree., 0.5; Z-Phe-Ile-Ser-OMe, 1:2, 48, --, 34, 176.degree. (decompn.), -34.2.degree., 0.5; Z-Ala-Met-Ile-OMe, 1:1.3, 72, 24, 59, 147.5-8.5.degree., (-45.degree.), 0.8; Z-Phe-Met-Ala-OMe, 1:1.3, 24, 96, 45, 188-90.degree., (-35.5.degree.), 0.7; Z-Phe-Met-Val-OMe, 1:1.3, 24, 72, 55, 141-3.degree., (-27.degree.), 1; Z-Phe-Met-Leu-OMe, 1:1.5, 24, 72, 57, 132-4.degree., (-30.degree.), 0.7; Z-Ala-Phe-Met-OMe, 1:1.3, 66, 36, 96, 156-7.degree., -62.1.degree., 1; Z-Leu-Phe-Val-OMe, 1:1.3, --, 21, 69, 148-50.degree., (-21.1.degree.), 1; Z-Met-Phe-Gly-OMe, 1:1.3, 48, 22, 96, 164.5-5.5.degree., -22.5.degree., 0.5; Z-Met-Phe-Ala-OMe, 1:1.3, 48, 22, 89, 174-5.degree., (-55.degree.), 1; Z-Met-Phe-Val-OMe, 1:1.3, 60, 36, 87.5, 162-4.degree., -48.5.degree., 1; Z-Met-Phe-Leu-OMe, 1:1.3, 60, 36, 89, 156-8.degree., -54.8.degree., 1; Z-Met-Phe-Ile-OMe, 1:1.3, 60, 36, 91, 167-8.5.degree., -41.1.degree., 1; Z-Met-Phe-Met-OMe, 1:1.3, 60, 36, 92, 143-5.degree., -54.1.degree., 1; Z-Met-Phe-Phe-OMe, 1:1.3, 60, 36, 97, 166-7.degree., (-38.2.degree.), 1; Z-Phe-Phe-Met-OMe, 1:1.3, 48, 24, 70, 164-5.5.degree., -25.1.degree., 1 (tetrahydrofuran); p-MeOC6H4CH2O2C-Try-Phe-Ala-OMe, 1:2, 48, 24, 71, 164-6.degree., -25.6.degree., 0.7 (EtOH); p-MeOC6H4CH2O2-Try-Phe-Leu-OMe, 1:2, 48, 24, 52, 152-4.degree., -27.8.degree., 0.7 (EtOH) The values in parentheses are [.alpha.] values. The appropriate VI and I (0.005 mole) and 0.5 g. Et3N in 30 cc. **dry** tetrahydrofuran treated during 0.5 hr. with stirring at room temp. with 0.0055 mole MeC: CNEt2 in a little tetrahydrofuran, and evapd., and the residue partitioned between H2O and AcOEt yielded the corresponding IV; method D. By these methods were prepd. the IV listed in the 1st table. The appropriate IV in the min. amt. dioxane or tetrahydrofuran treated with 20-100% excess amino acid alkyl ester HCl salt and an equiv. amt. AcONa, kept at the desired temp., and evapd., and the residue partitioned between H2O and AcOEt yielded the corresponding V (listed in the 2nd table) (Z = PhCH2AO2).

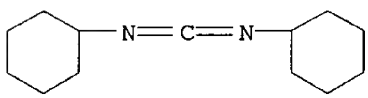
CC 44 (Amino Acids, Peptides, and Proteins)

IT **538-75-0**, Carbodiimide, dicyclohexyl- **6066-82-6**, Succinimide, N-hydroxy-
(in peptide prepn., racemization and)

IT **538-75-0**, Carbodiimide, dicyclohexyl- **6066-82-6**, Succinimide, N-hydroxy-
(in peptide prepn., racemization and)

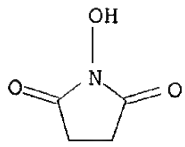
RN 538-75-0 HCAPLUS

CN Cyclohexanamine, N,N'-methanetetraylbis- (9CI) (CA INDEX NAME)



RN 6066-82-6 HCAPLUS

CN 2,5-Pyrrolidinedione, 1-hydroxy- (9CI) (CA INDEX NAME)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